DOCUMENT RESUME

ED 238 503 JC 840 035

AUTHOR Rosen, Mark I.; And Others
TITLE Employment and Training Expectations of Employers in Area Vocational, Technical and Adult Education District 4.
INSTITUTION Madison Area Technical Coll., Wis.; Wisconsin Univ., Madison. Graduate School of Business.
PUB DATE Dec 82
NOTE 102p.
PUB TYPE Reports - Research/Technical (143) -- Tests/Evaluation Instruments (160) -- Statistical Data (110)

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS College Graduates; *Educational Needs; Employer Attitudes; Employment Patterns; *Employment Projections; Job Training; Needs Assessment; Occupational Surveys; Personnel Evaluation; Questionnaires; School Business Relationship; Technical Institutes; Two Year Colleges
IDENTIFIERS *Wisconsin

ABSTRACT

A study was conducted to provide information on how Area Vocational Technical and Adult Education District 4 could more effectively serve the needs of area employers. The study sought to asssess potential growth or decline in industries, occupations, and skill areas with implications for current and future vocational training programs; and to determine the extent to which employers make use of District 4 graduates and their views of graduates' work habits and occupational preparation. Information was obtained from statewide employment data and projections, a survey of 18 mayors or city managers within District 4 regarding major employment expansion or contraction, and a survey of 899 District 4 employers to obtain information on employment expectations, anticipated training needs, assessment of graduates' effectiveness, and graduate utilization and placement. Study findings included the following: (1) employment levels and training needs in Wisconsin were expected to increase in the last half of the 1980's; (2) one-third of the employers surveyed felt that their current work force would benefit from additional training; (3) employers had a highly favorable impression of District 4 program graduates; and (4) firms planning expansion were interested in new employee, new skills, and new jobs training assistance from District 4, as well as in training assistance for managers and current employees. Survey instruments are appended. (HB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED238503

GRADUATE SCHOOL OF BUSINESS

UNIVERSITY OF WISCONSIN -MADISON

EMPLOYMENT AND TRAINING EXPECTATIONS OF EMPLOYERS IN AREA VOCATIONAL, TECHNICAL AND ADULT EDUCATION DISTRICT 4

Mark I. Rosen
Donald P. Schwab
William A. Strang
Daryush M. Nowrasteh

December, 1982

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

D. Nowrasteh

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

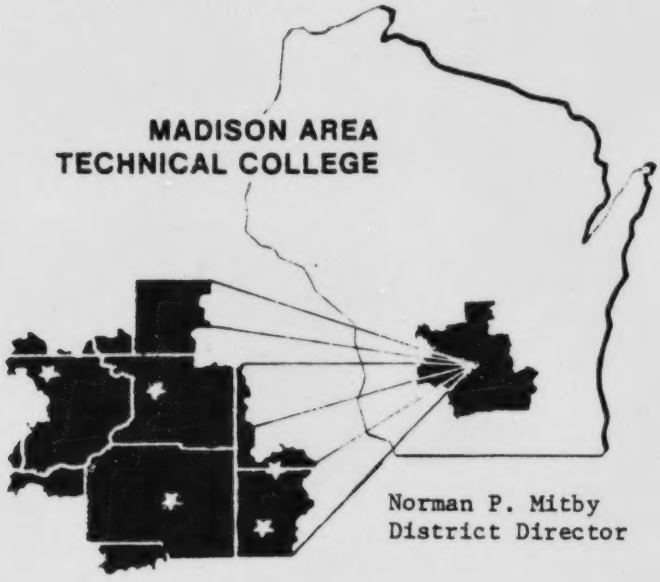
☐ This document has been reproduced as received from the person or organization originating it.

X Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

JC 840 035

EMPLOYMENT AND TRAINING EXPECTATIONS OF EMPLOYERS IN AREA VOCATIONAL, TECHNICAL, AND ADULT EDUCATION DISTRICT 4



Mark I. Rosen
Industrial Relations Research Institute
University of Wisconsin-Madison

Donald P. Schwab, Principal Investigator
Graduate School of Business and Industrial Relations
Research Institute
University of Wisconsin-Madison

William A. Strang
Director, Bureau of Business Research
University of Wisconsin-Madison

Daryush M. Nowrasteh, Project Coordinator
Planning and Economic Development Administrator
Area VTAE District 4

ACKNOWLEDGEMENTS

The input and assistance of a number of individuals in the preparation of this report is gratefully acknowledged.

Jean Knowles of the Bureau of Business Research, University of Wisconsin-Madison and Nadine Cordio of Madison Area Technical College helped in coordinating the project at all stages. Their effort was invaluable.

Donna Rounds of the University of Wisconsin-Extension and Kay Plantes of the Wisconsin Department of Development provided useful information at key points during the research phase.

The following faculty and staff of Madison Area Technical College conducted on-site interviews with area employers: Greg Ericson, Floyd Judd, Gene Solberg, Jim Rowsam, Bob Johnson, J. G. Hale, Doug Redsten, Dan Beyersdorf, Bob Heimerl, John Birong, Dick Virtue, Gary Gade.

Yitzhak Haberfeld assisted in the preparation of several of the tables used in this report.

The Area Vocational, Technical, and Adult Education District 4 Board, the Wisconsin Board of Vocational Technical, and Adult Education, the Madison-Dane County Employment and Training Consortium, and Joseph H. Seiverd, Assistant Director of Student Services at Madison Area Technical College provided funding for this report. We would especially like to recognize Norman P. Mitby, Director of District 4 for his role in obtaining support for the project.

Finally, we wish to thank the public officials and employers who responded to our surveys and participated in interviews. Their cooperation formed the basis of this report.

- The Authors

Additional copies of this document may be obtained by contacting:

Dr. Daryush Nowrasteh
Madison Area Technical College
211 North Carroll Street
Madison, Wisconsin 53703

TABLE OF CONTENTS

		PAGE
SECTION I:	OVERVIEW	1
SECTION II:	SUMMARY AND CONCLUSIONS	3
SECTION III:	OVERVIEW OF METHODOLOGY	10
SECTION IV:	RESULTS: DISTRICT 4 EMPLOYMENT EXPECTATIONS	12
SECTION V:	RESULTS: ANTICIPATED TRAINING NEEDS	24
SECTION VI:	RESULTS: UTILIZATION AND EVALUATION OF DISTRICT 4 GRADUATES	33
APPENDIX A:	METHODOLOGY	41
APPENDIX B:	INSTRUMENTATION	54
APPENDIX C:	NUMBER OF ORGANIZATIONS RESPONDING TO MAIL SURVEY FROM EACH COMMUNITY	74
APPENDIX D:	"OTHER" RESPONSES: POSITION OF RESPONDENT TO MAIL SURVEY	77
APPENDIX E:	EFFECT OF RESPONDENT POSITION ON RESULTS	78
APPENDIX F:	SKILL TRAINING NEEDED BY DISTRICT 4 EMPLOYERS	85
APPENDIX G:	INTEREST IN MANAGEMENT SEMINARS BY FUNCTIONAL AREA	90
APPENDIX H:	"OTHER" RESPONSES: HOW DISTRICT 4 GRADUATES WERE HIRED	92
APPENDIX I:	SUMMARIES OF RESPONSES TO REQUEST: "PLEASE USE THE SPACE BELOW FOR ANY ADDITIONAL REMARKS CONCERNING HOW DISTRICT 4 COULD ASSIST YOUR ORGANIZATION."	93

LIST OF TABLES

Table		Page
4-1	The District 4 Employment Mix Compared with Wisconsin's	17
4-2	The Impact of the District 4 Mix on Growth	18
4-3	Major Business Changes Expected by District 4 Mayors/City Managers by 1985	19
4-4	The Economic Climate and Employment Expectations Among District 4 Employers in Early 1982	21
4-5	Employer Sensitivity to Changes in Economic Climate (District 4 Employers)	22
4-6	Factors Identified as Most Important to Employment Expansion in District 4	22
5-1	Interest in District 4 Training Assistance as a Function of Employment Expectations	25
5-2	Percentage of Employers Interested in District 4 Assistance Among Firms with Perceived Training Needs	26
5-3	Occupations in Which Skill Training is Needed Among District 4 Employers	27
5-4	Employer Training Strategy Preferences	28
5-5	Employer Perceptions of How District 4 Can Assist with Training for New and Existing Employees	29
5-6	Interest in Orientation Training by Employer Size	30
5-7	Ranking of the Twenty-Five Most Frequently Checked Management Seminar Titles	31
5-8	Employer Preferences for Management Seminar Times	32
6-1	District 4 - Organization Interaction Regarding Employment of Graduates	34
6-2	How District 4 Graduates were Hired	34
6-3	Effect of District 4 Contact on an Employer's Likelihood of Contacting District 4 About Employment Opportunities	35
6-4	Effect of District 4 Contact on Whether Responding Organization Employs District 4 Graduates	35
6-5	Percentage of Employers That Plan to Expand Employment by Organizational Size	36
6-6	Ratings of Work Habits of District 4 Graduates	37
6-7	Ratings of Occupational Preparation of District 4 Graduates	38
6-8	Employer Perceptions of District 4 Graduates' Strengths and Weaknesses	39

LIST OF FIGURES

Figure		Page
4-1	Dane County Unemployment Rates (Unadjusted)	13
4-2	Effective Household Borrowing Costs After Adjusting for Taxes and Inflation (Closing Average Mortgage Rate)	14
4-3	Effective Corporate Borrowing Costs After Adjusting for Taxes and Inflation	14
4-4	Geographic Definition of "The Local Economy" (The District 4 Economy)	16

I. OVERVIEW

OBJECTIVE

The major objective of this study is to provide information on how Area Vocational Technical and Adult Education District 4 might more effectively serve the needs of area employers. In an attempt to achieve this objective, information was obtained on two broad issues:

1. Because it is essential that vocational training be appropriate to the employment needs of organizations, an effort was made to identify near term growth or decline in industries, occupations, and especially skill areas with implications for current vocational training programs of District 4 or programs that District 4 might contemplate developing.

2. Information was sought on the effectiveness and utilization of current District 4 training as seen through the eyes of area employers. This portion of the study was accomplished by seeking answers to the following questions:

- To what extent do area employers make use of District 4 graduates?
- Among those organizations that employ graduates, what do employers think of District 4 graduates' work habits and occupational preparations?
- How did employers and graduates of District 4 come together?
- Are efforts at contacting area employers fruitful in placing graduates?
- If so, which employers should District 4 contact to place graduates?
- What can District 4 do to improve graduates' preparedness for work?

PROCEDURE

A three-pronged research strategy was used to obtain the information sought:

1. Secondary state-wide employment data and projections were applied within the geographic boundaries of District 4.

2. Public officials within District 4 were surveyed regarding likely major employment expansion or contraction.

3. District 4 employers were surveyed and interviewed to obtain: (a) information on employment expectations, (b) anticipated training needs, (c) assessments of current District 4 graduates' effectiveness, and (d) information on utilization and placement of District 4 graduates.

ORGANIZATION OF REPORT

The report is organized into five additional sections. A summary of findings and our conclusions are presented in the next section followed by an overview of the methodologies used. The final three sections are organized around the major results of the study as follows:

Section IV District 4 Employment Expections. This section reports employment projections near term and to 1990 from secondary data, public officials and the employer mail survey.

Section V Anticipated Training Needs. This section reports data from both employer surveys on employer perceptions of training needs and their view of the role of District 4 in meeting those needs.

Section VI Utilization and Evaluation of District 4 Graduates. This section again uses data from both employer surveys to report area employers' use of District 4 graduates and their evaluation of those graduates.

II. SUMMARY AND CONCLUSIONS

The study used a variety of sources and methods to obtain information on how Area Vocational Technical and Adult Education District 4 might more effectively serve the needs of area employers. Major findings and conclusions of the study are reported in this section.

EMPLOYMENT

Current unemployment in District 4 and the rest of the nation are at unusually high levels and unlikely to decrease rapidly in the near future. Survey results indicate that area employers expectations about employment are closely linked to what happens to the national economy. In the short run, at least, unemployment levels in District 4 are likely to remain high. Especially problematical is the manufacturing sector where the public officials survey shows probable near term job losses, but few gains.

During the latter half of this decade, however, employment levels are projected to increase in Wisconsin generally and in District 4 in particular (see Section IV). In combination with fewer entrants to the labor force, unemployment should decline sharply. However, most of the employment increase is predicted to occur in the services sector. By the end of the decade construction/mining, manufacturing, transportation/communication/utilities, and government are all expected to constitute a smaller percentage of the labor force than at the beginning of the decade.

These changes have several implications for vocational education in District 4. First, general economic conditions appear to have a substantial impact on area employer perceptions of the need for vocational training (Section V). This applies not only to perceived training needs for new jobs and skills as would be expected, but also to training needs perceived for current employees.

It is likely an improvement in economic expectations will substantially increase area employer interest in utilizing District 4 to assist in training existing members of the labor force. It is worth noting that even in the current adverse economic climate, such interest is already high as discussed below.

Second, relative or even absolute declines in a sector of the economy does not necessarily mean that vocational education in shrinking sectors will be less important. In manufacturing, for example, it is likely that technological change will substantially increase the need for retraining. Thus, while employment opportunities for traditional District 4 graduates may decline in manufacturing, employers will in all likelihood experience an increased need for District 4 assistance in retraining efforts. This effort involves development of new programs to train the type of skill that is in step with technological change.

Thus, although growth or decline of a sector obviously has implications for vocational training resource allocation and program emphasis, it should not by itself determine such decisions. Technological change that impacts on skill requirements is also significant. Because the latter is unpredictable in both scope and timing, the value of continual communication between District 4 and area employers is essential.

TRAINING NEEDS

The mail survey and the follow-up on-site interviews revealed several findings about employer perceptions of training needs that have potentially important implications for District 4 (Section V). One of the most surprising is that over one-third of area employers reported that their current work force would benefit from additional training. Of these, nearly half (and substantially more than half of firms employing 10 employees or more) believe that District 4 could be of assistance in resolving those training needs. These employ-

ers feel that short courses and on-site training would most frequently be helpful. In a few instances assistance in training program development is sought. This general finding suggests that there is a substantial opportunity for District 4 to aid area employees by increasing its programming for workers already employed.

The surveys also revealed useful information regarding the occupations and skills that employers believe current employees need additional training in as well as changing job skills and new jobs that will require training assistance. Viewing the latter first, about a third of the respondents to the mail survey who anticipate training needs feel that computer-related skills training will be needed. This emphasis, it should be noted, is broad based and not confined to a few industries. Manufacturing employers, for example, emphasized the need for computer-based skill needs as much as employers in other industries.

Employers' widespread expectations of technological changes, particularly changes resulting in the need for computer skills, would appear to have direct implications for District 4 resource allocation and program development. Moreover, in all probability the current survey understates the degree to which skills involving emerging technology will impact on area employment, since firms which have not yet entered the area were not included. In this regard a Congressional study on high technology companies is of special interest.[1] This study can be interpreted to suggest that the District 4 area has a labor force, cost structure, and geographical location that is potentially very attractive to high technology organizations. To the extent that such firms locate here, training in computer technologies will become of even greater import.

The mail survey also found that a substantial number of District 4 employers perceive training needs among current employees in general business administration skills. Moreover, and again somewhat surprisingly, District 4 is

perceived as a source for such training. Half of the area's firms replying to the survey would view short courses in managerial topics offered by District 4 in a favorable light.

Still another need perceived by area employers involves orientation training. Approximately 25 percent of area employers also see District 4 as a source of assistance for orienting new employees.

Greater details on employer perceptions of training needs are reported in Section V. The major findings reported here suggest that District 4 would be wise to consider several general issues. First, there is a substantial need for training and retraining of existing employees. Employers perceive District 4 to be an appropriate vehicle for this training although nontraditional procedures (e.g., on-site training) will be required to meet these needs. Second, changes in employment patterns in general, and probable changes in technologies in particular, suggest that District 4 will need to alter training for traditional graduates. Area employers clearly view that the importance of computer-related skills is ascending rapidly. Third, to accommodate employers' needs suggested by the first and second issues, District 4 needs to recognize the importance of and emphasize contact between area employers and District 4.

DISTRICT 4 GRADUATES

Employers who employ District 4 graduates express a highly favorable impression of their work habits and preparation. Eighty percent of employers describe graduates' work habits as good to excellent, and over seventy percent indicate graduates are either better trained or far better trained than employees without such training. In a similar vein, graduates are generally perceived as being productive as soon as hired.

According to employers, the most frequent mechanism by which District 4 graduates found their jobs was through their own initiative. Nonetheless,

efforts by District 4 to place graduates are valuable. Employers were much more likely to employ graduates if they had been contacted at some point by a representative of District 4. It would appear that District 4 has been very successful at maintaining a high profile among the area's larger employers; the findings of this report suggest strengthening contacts with smaller employers also could be a fruitful means of placing graduates.

CONCLUSIONS

Employers in District 4 voice a clear and consistent need for continuing education. This need is, however, by no means unique to District 4, but is rather a broader phenomenon due in part to structural change in the economy. Fortunately, District 4 would appear to be in a preeminent position to creatively meet these needs, both by amplifying and strengthening existing programs, and through the development of innovative, nontraditional programs. It would seem that technological change is the watchword of the 80's, suggesting an ongoing situation of potential opportunities for District 4.

A major challenge for District 4 will be to increase employer awareness of what the district can and does offer, aside from the traditional "product" of vocationally-trained graduates. Since District 4 is already perceived favorably by area employers, making such inroads should not be too difficult. Whether or not employers will regard District 4 as an avenue for fulfilling their varied training needs is probably related to such perceptions.

There are two obvious ways these attitudes can be further enhanced. One is automatic; the excellent work performance of District 4 graduates serves as a continuous positive influence on firms who already employ them. Second, more personal contact between District 4 representatives and employers needs to be encouraged, since a dual public relations purpose is served. Not only are more graduates likely to find employment, but employers will learn first-hand about the various ways District 4 can meet their needs. In many cases, such personal contact may be the only way employers will become informed of the options available to them.

However, the potential value of these contacts is not by any means limited to these two points. If District 4 is to keep pace with technological change, it can only do so by maintaining close links with firms experiencing change.

And if instructors at District 4 are to remain state-of-the-art, they must be in frequent touch with those firms who acquire the latest technology.

A final note bears mention regarding the content of this report. If anything, its conclusions are conservative. Data herein was gathered during a period of economic contraction, and yet employers still saw numerous ways District 4 could assist them. An economic upturn would seem to bode an even more favorable employer welcome.

FOOTNOTES

[1]"Location of High Technology Firms and Regional Economic Development," Staff Study, Joint Economic Committee, Congress of the United States, 97th Cong., 2nd Sess. (Washington: U.S. Government Printing Office, 1982).

III. OVERVIEW OF METHODOLOGY

To address the major objective of this study several research procedures were utilized. The major method for obtaining area employer input was through a mail survey sent to a randomly selected sample of employers in selected industrial classifications. This information was supplemented from a nonrandom sample of employers selected for on-site interviews conducted by a group of District 4 instructors. These two methods were utilized in tandem in the expectation that they would, to some extent, compensate for each other's shortcomings. That is, it was felt that certain research objectives could best be met with a structured instrument, while others would potentially be best achieved in the setting of a one-on-one interview. In addition, steps were taken to minimize the methodological shortcomings found in other studies of employer perceptions of vocational training needs and assessments of vocational training programs.

The mail survey and on-site interviews are described in detail in Appendix A and summarized below. These two approaches were supplemented with two additional procedures for obtaining estimates of District 4 near term employment conditions. The first of these involved a survey of public officials located in District 4. Mayors or city managers for all 18 major cities located in the district were sent a questionnaire which asked questions about new operations expected in their community by 1985 (see Appendix B) and 11 responded.

The second involved the application of secondary state-wide employment projections to District 4. The two state-wide studies were prepared by the Wisconsin Department of Industry, Labor and Human Relations[1] and William A. Strang.[2] In this study these projections were applied to District 4 by dissaggregating state data on an industry basis and then applying these projections to District 4's industrial mix.

EMPLOYER MAIL SURVEY

A four-part questionnaire along with an explanatory letter was sent to 899 randomly selected District 4 employers in June, 1982. After a follow-up mailing, one-third of the employers representing 52 communities and assorted industries replied. Forty-three percent of these organizations employed graduates of District 4. Tests were conducted to see if the resulting sample was representative of the initial population of 899, and the results indicated that the sample could indeed be considered representative. Further tests were conducted to see if the position of the respondent to the questionnaire affected the results, and no significant effect was found. See Appendix A and E for a detailed discussion of these points.

EMPLOYER ON-SITE SURVEY

A six-part questionnaire was administered nonrandomly to 54 employers by instructors of District 4. Industries, locations, and sizes of organizations differed from the mail survey, as well as positions of those interviewed as compared with those responding to the mail survey. Ninety-one percent of the organizations interviewed employed graduates of District 4. See Appendix A for a detailed discussion.

IV. RESULTS: DISTRICT 4 EMPLOYMENT EXPECTATIONS

Economic conditions and expected changes in those conditions obviously constitute a transcendent force when considering programs to train and place people in the labor force. The relative level of economic activity as reflected in the unemployment rate, and changing employment opportunities reflected by shifts in industrial and occupational rates serve as an important backdrop to vocational training program emphasis.

The present section reports the results of analysis assessing probable employment changes to be expected in District 4. Data for these analyses come from secondary state-wide data, the survey of District 4 city managers and mayors and the mail survey of employers.

Concern about employment in Wisconsin has never been greater. Unemployment rates in the state have exceeded 10 percent in several months of 1982, highest since the Depression years. Total nonagricultural employment in the state actually fell 4.6 percent from July, 1979 to June, 1982.[1] The dominant theme in the 1982 gubernatorial campaign was the economy, and particularly, employment.

Dane County (which comprises the majority of District 4's population) historically has had more stable employment and lower unemployment than the state, because of the predominance of state government, the University, and the white-collar service industry (e.g., health care, legal services). However, as shown in Figure 4-1, the unadjusted unemployment rate in Dane County rose over the past three years; in the third quarter of 1982, it was between 6.5 and 7.0 percent, about twice its level three years earlier.

The national recession and the phenomenon of unusually high <u>real</u> (after taxes and inflation) interest rates (see Figures 4-2 and 4-3), which depressed construction and capital goods demand, are generally given as the explanation for Wisconsin's employment problems, and less directly for the difficulties in

Dane County. However, a study by the Wisconsin Department of Development suggests that beyond the recession, there are "aging industry" problems in some of the state's most important manufacturing industries (fabricated metal products, nonelectrical machinery, and instruments).[2] In these industries, Wisconsin's capital stock aged more rapidly than the nation's from 1968 to 1978. Thus, there may be a structural dimension to the employment problem as well.

EMPLOYMENT PROJECTIONS:

Two studies completed in 1982 forecasted an improvement in Wisconsin's employment over the decade, with particularly rapid employment growth to occur during the latter half of the decade.[3,4]

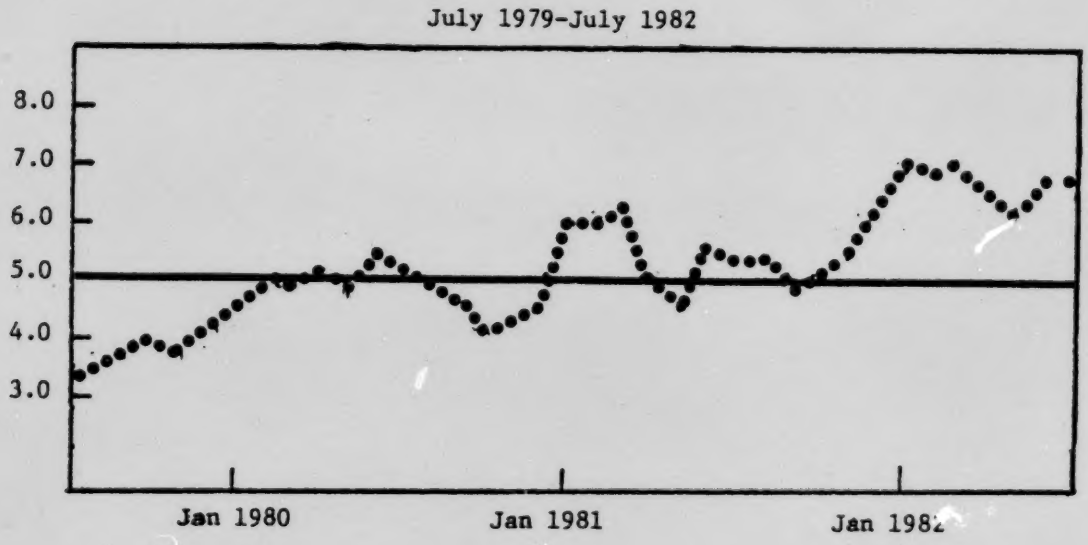
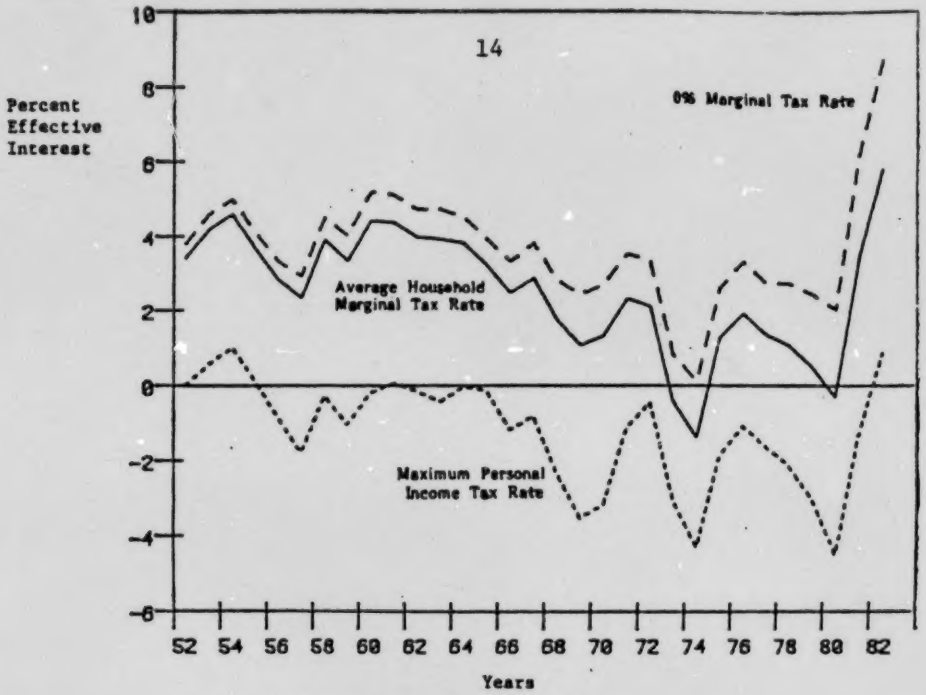


FIGURE 4-1

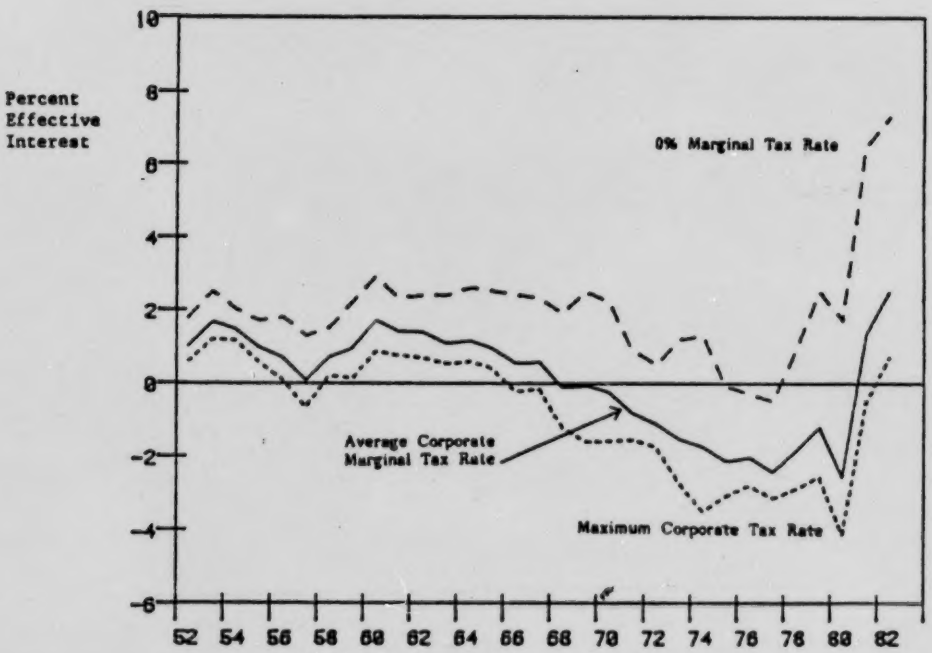
DANE COUNTY UNEMPLOYMENT RATES (UNADJUSTED)



Data available upon request from Washington Analysis Corporation.

FIGURE 4-2

EFFECTIVE HOUSEHOLD BORROWING
COSTS AFTER ADJUSTING FOR
TAXES AND INFLATION (CLOSING
AVERAGE MORTGAGE RATE)



Data available upon request from Washington Analysis Corporation.

FIGURE 4-3

EFFECTIVE CORPORATE BORROWING COSTS
AFTER ADJUSTING FOR TAXES AND INFLATION

The DILHR forecast indicated that Wisconsin's nonfarm wage and salary employment would grow by 348,000 jobs from 1980 to 1990 and that manufacturing jobs would grow by almost 65,000 over the same period. The most rapidly growing sector, in both absolute and percentage growth, was seen as the services sector, which is forecasted to add 121,000 jobs over the decade.[5] One interesting element of the DILHR study is that job growth was seen as occurring more rapidly than growth of the work force, thus drastically reducing the unemployment rate. The problem of the 1980's could be finding an adequate supply of qualified workers.

Using a different methodology, Strang's forecasts were similar to the DILHR forecasts in many regards, although they were even more optimistic. He forecasted a growth of 439,000 nonfarm wage and salary jobs and increase of 81,000 manufacturing jobs. His expectation, as DILHR's, was that the services sector would be most rapidly growing, adding 143,000 jobs over the decade.[6]

THE DISTRICT 4 ECONOMY

The most dominant characteristic of the District 4 (see Figure 4-4 for geographic definition) employment base is the heavy dependence on state government, including the University. Growth in this sector in the 1980's is expected to be modest, with some possibility of the University's employment remaining stable or even decreasing. Recognizing that government is not likely to provide the impetus for growth in the 1980's, many leaders in the community are looking elsewhere to find the basis for economic growth.

AREA VOCATIONAL, TECHNICAL AND ADULT EDUCATION DISTRICT NO. 4

The following towns, villages, and cities (in whole or in part) financially support the Area Board of Vocational, Technical and Adult Education District No. 4

ADAMS COUNTY

Towns
- Dell Prairie
- Jackson
- New Haven
- Springville

COLUMBIA COUNTY

Towns
- Arlington
- Caledonia
- Columbus
- Courtland
- Dekorra
- Fort Winnebago
- Fountain Prairie
- Hampden
- Leeds
- Lewiston
- Lodi
- Lowville
- Marcellon
- Newport
- Otsego
- Pacific
- Randolph
- Scott
- Springvale
- West Point
- Wyocena

Villages
- Arlington
- Cambria
- Doylestown
- Fall River
- Friesland
- Pardeeville
- Poynette
- Randolph
- Rio
- Wyocena

Cities
- Columbus
- Lodi
- Portage
- Wisconsin Dells

DANE COUNTY

Towns
- Albion
- Berry
- Black Earth
- Blooming Grove
- Blue Mounds
- Bristol
- Burke
- Christiana
- Cottage Grove
- Cross Plains
- Dane
- Deerfield
- Dunkirk
- Dunn
- Fitchburg
- Madison
- Mazomanie
- Medina
- Middleton
- Montrose
- Oregon
- Perry
- Pleasant Springs
- Primrose
- Roxbury
- Rutland
- Springdale
- Springfield
- Sun Prairie
- Vermont
- Verona
- Vienna
- Westport
- Windsor
- York

Villages
- Belleville
- Black Earth
- Blue Mounds
- Brooklyn
- Cambridge
- Cottage Grove
- Cross Plains
- Dane
- Deerfield
- DeForest
- Maple Bluff
- Marshall
- Mazomanie
- McFarland
- Mt. Horeb
- Oregon
- Rockdale
- Shorewood Hills
- Verona
- Waunakee

Cities
- Madison
- Middleton
- Monona
- Stoughton
- Sun Prairie

DODGE COUNTY

Towns
- Calamus
- Clyman
- Elba
- Emmet
- Fox Lake
- Lebanon
- Lowell
- Portland
- Shields
- Westford

Village
- Randolph

City
- Watertown

GREEN COUNTY

Towns
- Adams
- Brooklyn
- Exeter
- New Glarus
- Washington
- York

Villages
- Belleville
- Brooklyn
- New Glarus

IOWA COUNTY

Towns
- Arena
- Clyde
- Dodgeville
- Moscow
- Ridgeway
- Wyoming

Villages
- Arena

JEFFERSON COUNTY

Towns
- Aztalan
- Cold Spring
- Concord
- Farmington
- Hebron
- Ixonia
- Jefferson
- Koshkonong
- Lake Mills
- Milford
- Oakland
- Palmyra
- Sullivan
- Sumner
- Waterloo
- Watertown

Villages
- Cambridge
- Johnson Creek
- Sullivan

Cities
- Fort Atkinson
- Jefferson
- Lake Mills
- Waterloo
- Watertown
- Whitewater

JUNEAU COUNTY

Towns
- Lindina
- Lyndon
- Seven Mile Creek
- Summit
- Wonewoc

Villages
- Union Center
- Wonewoc

City
- Wisconsin Dells

MARQUETTE COUNTY

Towns
- Buffalo
- Crystal Lake
- Douglas
- Harris
- Mecan
- Montello
- Moundville
- Neshkoro
- Newton
- Oxford
- Packwaukee
- Shields
- Springfield
- Westfield

Villages
- Endeavor
- Neshkoro
- Oxford
- Westfield

City
- Montello

RICHLAND COUNTY

Towns
- Buena Vista
- Ithaca
- Westford

Village
- Lone Rock

ROCK COUNTY

Towns
- Porter
- Union

SAUK COUNTY

Towns
- Baraboo
- Bear Creek
- Dellona
- Delton
- Excelsior
- Fairfield
- Franklin
- Freedom
- Greenfield
- Honey Creek
- Ironton
- LaValle
- Merrimac
- Prairie du Sac
- Reedsburg
- Spring Green
- Sumpter
- Troy
- Washington
- Westfield
- Winfield
- Woodland

Villages
- Ironton
- Lake Delton
- LaValle
- Loganville
- Merrimac
- North Freedom
- Plain
- Prairie du Sac
- Rock Springs
- Sauk City
- Spring Green
- West Baraboo

Cities
- Baraboo
- Reedsburg
- Wisconsin Dells

FIGURE 4-4

GEOGRAPHIC DEFINITION OF "THE LOCAL ECONOMY" (THE DISTRICT 4 ECONOMY)

The District's industry mix can be compared to the state's using an occupational matrix developed in 1980 (see Table 4-1). As shown in the table, the District is less dependent than the state on manufacturing (although almost 20% of the jobs in the District were manufacturing), and far more dependent on services and finance, insurance, and real estate.

TABLE 4-1

THE DISTRICT 4 EMPLOYMENT MIX
COMPARED WITH WISCONSIN'S

	Percentage of Total* (1) District 4 (July 1979-June 1980)	(2) Wisconsin (1980)	(1)÷(2) Ratio of District 4 % to State %
Construction/Mining	5.3	4.2	1.26
Manufacturing	19.9	29.8	.67
Transportation, Communications, Utilities	4.1	5.0	.82
Trade (wholesale and retail)	24.6	23.7	1.04
Finance, Insurance, Real Estate	7.0	5.1	1.37
Services	33.4	20.4	1.64
Government (except State Government)	5.7	11.8	.48
Total*	100.0	100.0	1.0

*Total nonfarm employment except state government.

SOURCES: Madison Area VTAE District Occupational Employment Statistics Matrix, July, 1979-June, 1980; Wisconsin Department of Industry, Labor and Human Relations, Wisconsin Industry Projections to 1990.

When the statewide forecasts for economic growth in the 1980's are applied to the District 4 mix of employment by industry, the expectation is that District 4 employment, except for state government, will grow more rapidly than Wisconsin's employment (see Table 4-2). According to the DILHR forecast, state employment will grow 18.0 percent over the decade. When the industry growth

rates are applied to the District 4 industry mix, the total forecasted growth is 21.57 percent. The Strang forecast was 22.41 percent growth statewide and 27.79 percent growth for the District, based on its industry mix.

TABLE 4-2

THE IMPACT OF THE DISTRICT 4 MIX ON GROWTH

Industry	(1) Percentage of Total District 4 Employment	(2) Forecasted 1980-1990 Wisconsin Growth (DILHR)	(1)x(2) Weighted Growth Factor	(3) Forecasted 1980-1990 Wisconsin Growth % (Strang)	(1)x(3) Weighted Growth Factor
Construction/Mining	5.3	15.8	6.14	16.4	6.17
Manufacturing	19.9	11.6	22.20	14.5	22.79
Transportation, Communication, Utilities	4.1	5.7	4.33	10.5	4.53
Trade (wholesale or retail)	24.6	22.3	30.10	30.7	32.15
Finance, Insurance, Real Estate	7.0	13.5	7.95	42.6	9.98
Services	33.4	33.3	44.52	37.6	45.96
Government (except State government)*	5.7	11.0*	6.33	9.0*	6.21
	100.0	18.0	121.57	22.4	127.79

*The percentage growth forecasted for all government, including state government, was used because the statewide forecasts had no forecasted growth for government except state government.

SOURCES: Madison Area VTAE District Occupational Employment Statistics Matrix, July, 1979-June, 1980; Wisconsin Department of Industry, Labor and Human Relations, Wisconsin Industry Projections to 1990; William A. Strang, Wisconsin's Economy in 1990: Our History, Our Present, Our Future.

Thus, aside from the difficulty of a slowing in government employment growth, the District has an industry mix that has positive growth implications. The relatively high proportion of service industry employment in the District (almost 65% above average) is the primary basis for the positive outlook. In both the Strang and DILHR forecasts, that sector is forecasted to grow more rapidly than any other.

The long-range forecasts for the state bode well for the District 4 economy. However, the short-term situation in the local economy is negative, with unemployment rates almost twice as high as they were a decade earlier. The mayor/city manager survey was performed in an attempt to obtain information about major employment changes that are likely to occur in the District economy in the near term.

TABLE 4-3

MAJOR BUSINESS CHANGES EXPECTED BY
DISTRICT 4 MAYORS/CITY MANAGERS BY 1985

Expectation	Number of Cities*	Expected Job Change
Expecting new operations	2	2,220
Expecting major additions to existing businesses	5	795
Expecting major cutbacks	3	(975)

*Cities responding included Baraboo, Lake Mills, Lodi, Madison, Portage, Reedsburg, Stoughton, Waterloo, Watertown, Whitewater, Wisconsin Dells. Eleven of 18 mayors/city managers surveyed responded.

Table 4-3 reporting the results shows that only two city executives expected new operations in their city and the total employment gain anticipated was 2,220. Relatively few of these jobs were expected in manufacturing. Five city executives expected major additions to existing businesses that would yield almost 800 new jobs. Finally, three of the respondents indicated that major cutbacks could result in a loss of almost 1,000 jobs. The bulk of the job loss would be in manufacturing.

Although the survey had limitations (such as the need for city executives to maintain confidentiality to businesses they might be working with) it suggests that some job expansion is anticipated. The fact that relatively few of

these jobs would come from manufacturing is consistent with the broader statewide forecasts that indicate manufacturing will continue to decline as a proportion of total state employment. In fact, the executive reports indicate that the most significant growth in District 4 would occur in the services sector.

Although the statewide forecasts to 1990 and the nearer term city expectations in the District both suggest employment growth, economic planners need to be very concerned as to just how we are going to move from high unemployment to a situation of low unemployment.

The General Economy and District 4 Employment

No factor is so important to achieving employment growth in the District as a recovery of the national economy. This was confirmed by the mail survey of District 4 employers. As shown in Table 4-4, close to half of the employers surveyed would increase their employment by 1985 if the economy improves; only 8 percent plan expansion if the economy worsens. Conversely, 31 percent would plan reductions if the economy worsens, 8 percent would reduce if it remains unchanged (remember, the economy in early 1982, at the time of the survey, was in bad condition), and almost none (1.3%) plan reductions even if the economy improves. Not shown in the table but available in the tabulations was the fact that only 5.2 percent of the respondents will expand their employment regardless of the economic climate.

TABLE 4-4

THE ECONOMIC CLIMATE AND EMPLOYMENT EXPECTATIONS
AMONG DISTRICT 4 EMPLOYERS IN EARLY 1982

By 1985, We Will:	Percentage of Respondents If the Economy Improves	Remains As Is	Worsens
Expand our Employment	46.8	15.4	7.7
Keep the Same Employment	51.9	76.3	61.4
Reduce our Employment	1.3	8.3	30.9
	100.0	100.0	100.0

The relevance of the general economy to employment plans was established in Table 4-4. The percentage shifts in employment that occur among the firms depending on whether the economic climate "improves" or "worsens" (the extremes) are shown in Table 4-5. As shown there, almost half (47.7%) of the respondents wouldn't see any difference in their employment plans on the basis of either a better or worse economic climate. However, about 20 percent of the respondents felt that the economic extremes would cause more than a 25 percent "swing" in their employment by 1985. The average difference estimated by the 176 respondents was a 17.5 percent "swing" attributable to the better or worse climates; the median response was a 4.8 percent "swing."

Finally, respondents were asked what factors will be important in determining whether or not their business expands at their District 4 location by 1985. The question was asked to obtain information about location factors that might be important.

TABLE 4-5

EMPLOYER SENSITIVITY TO CHANGES IN ECONOMIC CLIMATE
(DISTRICT 4 EMPLOYERS)

Employment/Economic Climate Sensitivity Factor (Percentage Difference in Employment Change Between an "Improved" or "Worsened" Economic Climate*)	Percent of Respondents
No difference	47.7
1-10% difference	15.9
11-25% difference	15.9
26-50% difference	11.9
51-100% difference	6.8
More than 100% difference	1.7

If a firm indicated it would increase employment 10 percent by 1985 if the economic climate improves and would reduce employment 15 percent by 1985 if the economy worsens, its sensitivity factor would be 25 percent.

As shown in Table 4-6, factors related to the health of the economy or specific markets were most often mentioned. Interest rates, in particular, were seen as a specific economic climate factor of strong importance. Several respondents mentioned the need for their customers' businesses to improve.

TABLE 4-6

FACTORS IDENTIFIED AS MOST IMPORTANT TO
EMPLOYMENT EXPANSION IN DISTRICT 4

Health of Economy or Specific Markets	Number of Respondents Mentioning
"Improved economic climate"	60
"Lower interest rates"	54
"Pickup in construction"	11
"Health of customer industries" (e.g., auto, farm, Ray-O-Vac)	8
"Lower inflation"	5
	138
Company Factors	
"Sales increase"	24
"Market expansion"	12
"Marketing effectiveness"	11
"Competitive strength"	11
"Product development"	11
"New customers"	4
	73
Location Factors	
Government attitudes, regulations	12
Government funds available	10
State taxes	5
Balanced government budgets	5
	32

Second to the economic climate in importance were several "company factors," or factors that the company was felt to have control over. Most often mentioned was "a sales increase." This response doesn't provide much understanding, but the several marketing-related factors that follow indicate a concern about being able to compete effectively and to be able to develop new products and markets.

Only 32 respondents mentioned location factors that would influence growth--items that could be used to differentiate one location from another. A dozen respondents indicated concerns about regulations and government attitudes. Almost as many (10) were concerned that government have adequate funds to purchase the services the companies were offering. Only five respondents mentioned the level of state taxes as important to expansion.

The general economy clearly seems to be the most crucial factor related to employment growth in the District 4 economy.

FOOTNOTES

[1]Wisconsin Department of Industry, Labor and Human Relations, Wisconsin Employment and Economic Indicators (August, 1979 and July, 1982).

[2]Kay Plantes, Wisconsin Manufacturing: A Development Strategy for the 1980's (Madison: Wisconsin Department of Development, 1982), p. viii.

[3]Wisconsin Department of Industry, Labor and Human Relations, Wisconsin Industry Projections to 1990 (Madison: June, 1982), pp. 6-7.

[4]William A. Strang, The Wisconsin Economy in 1990: Our History, Our Present, Our Future (Madison: University of Wisconsin-Madison School of Business, June, 1982), p. 18.

[5]Wisconsin Department of Industry, Labor and Human Relations, pp. 6-7.

[6]William A. Strang, p. 18.

V. RESULTS: ANTICIPATED TRAINING NEEDS

The results of the previous section suggest two general conclusions. First, by 1990 employment opportunities are likely to be strong and unemployment rates (at least among trained personnel) are likely to be low. This bodes favorably for both the continuing importance of vocational training and the longer term economic well being of vocationally trained graduates.

The second conclusion is, however, of more immediate interest. In the near term, employment opportunities among District 4 employers will depend heavily on general economic conditions. Given this state of affairs, it could be expected that employer perceptions of training needs would, to some extent, also reflect their perceptions of the general economic climate. The first portion of this section addresses that question. Subsequent portions of this section report results of employer perceptions regarding skill training needs, orientation training needs, and managerial training needs.

ECONOMIC CLIMATE AND TRAINING NEEDS

Table 5-1 contrasts interest in District 4 training assistance between the firms that expect to expand employment (assuming static employment conditions) and firms that expect their employment will remain the same. The table shows that not only are firms planning expansion more interested in new employee, new skills and new jobs training assistance from District 4, as would be expected, but that they are also more interested in training assistance for managers and current employees. In short, firms planning to expand even if economic conditions remain unfavorable show greater interest in District 4 assistance for all types of training activities.

TABLE 5-1

INTEREST IN DISTRICT 4 TRAINING ASSISTANCE AS A FUNCTION OF EMPLOYMENT EXPECTATIONS

	Employment	
	Expand	Remain the same
New employees	40%	19%
Jobs which are expected to change	23	7
New jobs	14	6
Managerial seminars	74	51
Current employees	40	15

Table 5-1 thus suggests that employer interest in vocational training at all levels is tied rather closely to their economic expectations. An improving economic climate will not only increase employer demand for traditionally trained vocational graduates, but will in all likelihood also increase demand for on-site training and nontraditional training (e.g., managerial training). At the same time, changes in the economic climate in favorable or unfavorable directions could alter the demand for District 4 training assistance reported in subsequent portions of this section.

SKILL TRAINING NEEDS

Major parts of both the mail survey and on-site interview survey were aimed at obtaining information on employer perceptions of skill training needs and perceptions of how District 4 could help in meeting those needs. Such needs would likely emerge in firms that anticipate changes which require new jobs or expect jobs to change. In addition, however, employers might perceive that current employees would benefit from an upgrading of skills through training.

Mail survey respondents were asked to indicate whether they had training needs for current employees, and if so, whether they believed that District 4 could be of assistance in meeting those training needs. Similar questions were

asked about training needs and District 4 assistance for anticipated new skills and jobs. Somewhat surprisingly, firms reported the greatest training needs for current employees. Thirty-five percent of the firms felt existing employees would benefit from additional training. Nineteen percent anticipated training needs because of jobs which are expected to change and eleven percent saw training needs resulting from new jobs.

Table 5-2 shows the percentage of firms, by size, that indicated an interest in District 4 training assistance for each training category among those firms who perceive training needs. Across firms of all size and training categories, about half of the employers who perceive training needs believe that District 4 assistance could be useful. This is particularly significant in the case of current employees since, as noted, over one-third of area employers perceive that these employees could benefit from training.

TABLE 5-2

PERCENTAGE OF EMPLOYERS INTERESTED IN DISTRICT 4 ASSISTANCE AMONG FIRMS WITH PERCEIVED TRAINING NEEDS

	Percentage Wanting Assistance[a,b]		
Number of Employees	Existing Employees	Jobs Which Are Expected to Change	New Jobs
1 to 9	36.0%	55.6%	44.4%
10 to 24	51.7	30.8	50.0
25 to 49	81.8	71.4	100.0
50 to 149	28.6	40.0	66.7
150 or more	55.0	50.0	42.9
Weighted Average	48.5	46.4	54.8

[a]Percentage wanting assistance = Number wanting assistance/number of organizations with training needs x 100.

[b]N = 289

Interest in District 4 assistance was even stronger for interviewed firms. About 70% of these organizations expressed an interest in having District 4 assist with training of various types.

Table 5-3 summarizes the occupations (in the words of employers who responded to the mail survey) where training is or will be needed. The values in the table represent the percentage of times a particular occupation was identified among those employers who indicated skill training needs. A more detailed list of employer responses is presented in Appendix F.

TABLE 5-3

OCCUPATIONS IN WHICH SKILL TRAINING IS NEEDED AMONG DISTRICT 4 EMPLOYERS

	Percentage Indicating Need[a]		
Occupational Grouping	Current Jobs[b]	Jobs Which Are Expected to Change[c]	New Jobs[d]
Computer related	13%	35%	36%
General business administration	26	2	18
Traditional office/clerical	12	2	3
Word processing	6	12	9
NC machining	0	5	9
Sales/marketing	6	4	15
Electronic technicians	4	14	6
Medical/dental	21	18	12
Banking	13	26	9
Maintenance	7	5	0
Auto/truck technology	6	7	3
Construction	5	0	3
Machinist, tool and die	10	0	0
Welding	4	0	0
Woodworking	10	0	0
Retail sales	5	0	0
Electrical trades	3	0	0
Printing	7	0	0
Newspaper	4	0	0
Quality control	2	0	0
Miscellaneous technical	16	5	15
Miscellaneous unskilled	12	5	9

[a]Percentages were calculated based on the number of employers in each grouping who indicated training needs. Totals need not equal 100%.

[b]N=105

[c]N=57

[d]N=33

Two findings summarized in Table 5-3 are especially noteworthy. First, among current jobs, area employers see training in general business administration skills as the single greatest need. This finding, coupled with the finding indicating that many area employers view District 4 as an appropriate source of admininstration training (see subsequent section on managerial training) has potential implications for District 4 program development.

The second finding of special interest is the large percentage of computer-related job changes and new jobs that employers believe training is appropriate for. This finding was reinforced by the results from the on-site interviews. About 10% of employers felt current employees needed computer training and over 15% saw computer training needed within the next 3-5 years.

Mail survey employers were also asked whether outside training assistance could be helpful, and if so, whether they preferred on-site training, off-site training and/or whether they preferred to hire new employees. For all categories (existing, changed, and new jobs) over two-thirds of the employers felt outside assistance would be useful. Among those, the percentages of preferred strategies for assistance are shown in Table 5-4.

TABLE 5-4

EMPLOYER TRAINING STRATEGY PREFERENCES

	Percentage Choosing Strategy[a]		
Strategy	Existing Jobs	Jobs Which Are Expected to Change	New Jobs
Off-site classes, seminars or workshops using outside assistance	41%	49%	54%
On-site classes, seminars or workshops using outside assistance	21	36	22
Hire new employees	43	35	54

[a]Percentages calculated based on the number of employers who indicated one or more preferred stategies in each category. Total need not equal 100%.

On-site interviews provided more specific information on the methods District 4 employers view as useful for delivering training services. These responses are reported in Table 5-5. Although 15% are interested in in-plant, 22% view short courses and seminars as a useful medium.

TABLE 5-5

EMPLOYER PERCEPTIONS OF HOW DISTRICT 4 CAN ASSIST WITH TRAINING FOR NEW AND EXISTING EMPLOYEES

District 4 Role	Percent of Respondents Reporting[a]
In-plant courses	15%
Short courses, seminars	22
On-the-job training	4
Near the plant	4
Evening courses	13
Design in-plant training	2
Train instructors	2
Make instructor advice accessible	2

[a]Responses need not total 100%

ORIENTATION TRAINING

Information obtained during the pilot testing phase on the mail survey suggested that a substantial minority of employers conduct or see the need to conduct new employee orientation training and that a number of these might be interested in District 4 assistance. Accordingly, questions were asked on the final survey regarding orientation. Table 5-6 shows the percentage of respondents, by size, with orientation programs and the percentage interested in working with District 4 to develop a new or existing orientation program. The table

shows that employee orientation training is positively related to employer size as one would expect. However, interest in District 4 assistance is highest among employers of less than 10 employees and 50 or more employees.

TABLE 5-6

INTEREST IN ORIENTATION TRAINING BY EMPLOYER SIZE

Number of Employees	Percent With Program	Percent Interested in District 4 Assistance
1 to 9	32%	23%
10 to 24	41	20
25 to 49	48	17
50 to 149	56	36
150 or more	81	26

MANAGERIAL TRAINING

Although vocational training programs do not traditionally deliver managerial training, questions were asked regarding area employer interest in managerial training if offered by District 4. Respondents to the mail survey were asked to check any of 42 prospective topics spread over general management, accounting/finance, human resources, production, marketing and other. In general, respondents showed a very strong interest in District 4 offering one or more such courses. One-half the responding firms checked at least one course. In general, interest in such offerings was positively related to employer size. About a third of the smallest firms expressed an interest, but over two-thirds of the largest employers checked one or more topics.

TABLE 5-7

RANKING OF THE TWENTY-FIVE MOST FREQUENTLY CHECKED MANAGEMENT SEMINAR TITLES

Seminar	Percent Indicating Interest
Supervisory skills	25%
Time management	19
Decision making and problem solving	18
Stress management	16
Credit and collection	15
Cost control	12
Personnel policies	12
Training and development	11
Cost accounting	11
Profit planning	11
New product development	10
Salesman training	10
Data processing	10
Recruitment and selection	10
Advertising	10
Marketing strategy	10
Risk management	10
Inventory control	9
Affirmative action and EEO	8
Quality control	8
Compensation	8
Purchasing	7
Labor relations	7
Capital expenditure analysis	7
Breakeven analysis	7

Table 5-7 shows the percentage of respondents who checked the 25 most frequently chosen topics. The table shows that general management skills in particular are of interest to respondents. Appendix G reports the frequency with

which each topic was checked by functional area. Table 5-8 reports the time preferences for management seminars among respondents checking one or more topics.

TABLE 5-8

EMPLOYER PREFERENCES FOR MANAGEMENT SEMINAR TIMES

Time	Percent Indicating Preference
Morning	12%
Afternoon (1:00-3:00)	8
Late afternoon (3:30-6:00)	14
Evening (6:00-10:00)	43
Saturday	6
No Preference	17

VI. RESULTS: UTILIZATION AND EVALUATION OF DISTRICT 4 GRADUATES

The previous section showed that area employers see substantial training needs among current and anticipated employees. It also showed that employers see District 4 as a logical source of training expertise for these employees both in traditional and emerging skill areas, but also a potentially useful source for orientation and managerial training as well.

The present section reports information obtained from the mail survey and on-site interviews regarding area employer utilizations of District 4 graduates and employer evaluation of the quality of those graduates.

UTILIZATION OF DISTRICT 4 GRADUATES

As discussed in Section III and Appendix A, about 40 percent of the mail survey respondents employ or have employed District 4 graduates. As noted, this percentage likely overstates actual District 4 employment penetration among area employers because only about 30 percent of nonrespondents employ District 4 graduates.

Contacts between District 4 and employers.

Table 6-1 shows the degree to which District 4 contacted organizations regarding employment of graduates as well as the degree to which organizations initiate contact with District 4 when they have an opening. About half of the organizations surveyed have been approached directly by graduates seeking employment. One-fourth contact District 4 when they have an opening, and about a fourth have been contacted by District 4.

How graduates were hired. The largest percentage of graduates were hired at their own initiative; a finding consistent with other studies. Other methods used by graduates to obtain employment varied considerably, as shown in Table 6-2 and Appendix H.

TABLE 6-1

DISTRICT 4 - ORGANIZATION INTERACTION REGARDING EMPLOYMENT OF GRADUATES

	Percentage[a]
Employer contacted by District 4	25.4
District 4 graduate(s) applied to employer	49.8
Employer contacted District 4	26.4

[a]Since respondents could answer yes or no to any of these three categories, the total need not equal 100%.

TABLE 6-2

HOW DISTRICT 4 GRADUATES WERE HIRED

	Mail Survey		On-Site Interviews	
Method	Number	Percentage[a]	Number	Percentage[a]
Graduates' initiative	65	50.8	22	44.9
District 4 placement office	23	18.0	21	42.9
District 4 instructor	21	16.4	20	40.8
Employee referrals	28	21.9	8	16.3
Newspaper[b]	-	-	18	36.7
Other[c]	43	33.6	12	24.5
Don't know[d]	9	7.0	-	-

[a] Since employers could respond yes or no to each method, no overall totals are provided. Percentages were derived using the number of employers among surveyed and interviewed organizations who employed District 4 graduates.

[b] This category was not included on the mail survey.

[c] See Appendix H for a list.

[d] This category was not included on the interview questionnaire.

Value of contacting employers. While Table 6-2 shows most jobs were attained through the graduates' initiative, contacts by District 4 appear very useful. Table 6-3 shows that organizations are much more likely to contact District 4 when they have an opening if they have been previously contacted by District 4. Additionally, Table 6-4 shows that employers are much more likely to employ District 4 graduates if they have been contacted. However, the reader

TABLE 6-3

EFFECT OF DISTRICT 4 CONTACT ON AN EMPLOYER'S LIKELIHOOD OF CONTACTING DISTRICT 4 ABOUT EMPLOYMENT OPPORTUNITIES[a]

	Contacted by District 4		
Contacts District 4	Yes	No	
Yes	17.0%	10.4%	27.4%
No	9.0	63.5	74.0
	26.0	72.6	100.0

[a] N = 288

TABLE 6-4

EFFECT OF DISTRICT 4 CONTACT ON WHETHER RESPONDING ORGANIZATION EMPLOYS DISTRICT 4 GRADUATES[a]

	Contacted by District 4		
Employs District 4 Graduates	Yes	No	
Yes	22.4%	20.3%	42.7%
No	4.3	53.0	57.3
	26.7	73.3	100.0

[a] N = 281

should be cautioned that a cause/effect relationship cannot be clearly established from these findings. Furthermore, there is a potential size of employer effect in both Tables 6-3 and 6-4. Nevertheless, the evidence suggests that District 4's attempts to establish a relationship with employers "pays off" with respect to placement of graduates.

Which employers should District 4 contact to place graduates? Up to the present time data shows that District 4 has contacted primarily larger employers. However, those employers who indicated that they would expand employment in an improved or static economic climate were not necessarily the largest employers. This is shown in Table 6-5.

TABLE 6-5

ORGANIZATIONAL PERCENTAGE OF EMPLOYERS
THAT PLAN TO EXPAND EMPLOYMENT BY SIZE

Number of Employees	Percent Indicating Plans for Expansion of Employment	
	Improved Economic Climate[a]	Static Economic Climate[b]
1-9	45.7%	14.4%
10-24	45.8	19.1
25-49	50.0	17.9
50-149	55.2	10.7
150 or more	36.7	6.9

[a] N = 106
[b] N = 32

The tentative implication to be drawn from these findings is that District 4 should pay more attention to establishing relationships with smaller firms as

an additional avenue for finding graduates employment, since they are equally likely to have openings.

EVALUATION OF DISTRICT 4 GRADUATES

Overall evaluations. Table 6-6 shows overall ratings of District 4 graduates' work habits obtained from the mail survey respondents. Of those responding over 95% reported that District 4 graduates' work habits were satisfactory or better, and over 80% reported they were good to excellent.

TABLE 6-6

RATINGS OF WORK HABITS OF DISTRICT 4 GRADUATES

Ratings	Number Responding[a]	Percentage
Excellent	30	24.8
Excellent/Good	5	4.1
Good	67	55.4
Good/Satisfactory	6	5.0
Satisfactory	8	6.6
Satisfactory/Fair	0	0.0
Fair	4	3.3
Fair/Poor	0	0.0
Poor	1	0.8
Total Responding	121	100.0%

[a]Five "don't know" responses were omitted.

Table 6-7 shows employer ratings of occupational preparation of District 4 graduates. Just over 70% indicated that graduates were either better trained or far better trained than employees without such training.

TABLE 6-7

RATINGS OF OCCUPATIONAL PREPARATION OF DISTRICT 4 GRADUATES

Ratings	Number Responding[a]	Percentage
Far better trained	18	16.8
Far better trained/ better trained	3	2.8
Better trained	54	50.5
Better trained/ about the same	6	5.6
About the same	23	21.5
About the same/ less prepared	0	0
Less prepared	2	1.9
Less prepared/far less prepared	0	0
Far less prepared	1	0.9
Total Responding	107	100.0%

[a]Sixteen "don't know" responses were omitted.

These two findings are fairly consistent with those of studies in other states.[1] Employers generally rate vocationally-trained graduates' work habits as good or better, and tend to view occupational preparedness of graduates as superior to non-graduates. It was not, however, feasible to statistically compare the present findings with those of other studies.

Evaluation by other characteristics. Small sample sizes often precluded a satisfactory statistical test of ratings as a function of other variables. However, as the tables in Appendix E suggest, no differences in evaluation were found as a function of respondent position. In addition, other analyses did not reveal differences in evaluation by industry or geographical location of responding organizations.

Graduates' strengths and weaknesses

Employers were asked several questions during on-site interviews that were not asked on the mail survey. The first solicited impressions of graduates' preparation for work with regard to strengths and weaknesses. Table 6-8 summarizes employer comments. It would appear that employers perceived graduates'

TABLE 6-8

EMPLOYER PERCEPTIONS OF DISTRICT 4
GRADUATES' STRENGTHS AND WEAKNESSES

Strengths	Percent of Times Indicated[a]
Highly motivated	15%
Independent	2
Prepared for work	33
Knowledgeable	13
Skilled	19
Dedicated	2
Able to solve problems	2
Generally favorable	26
Weaknesses	
Lack of on-the-job experience	19%
Work ability	8
Lack of knowledge in skill area	22
Mathematics	4
Relations with peers	4
Communication skills	11
Expectations too high	2

[a]Employers responded to open-ended questions. Totals may include more than one response from each. N = 54.

greatest asset to be their preparation for work. This is corroborated both by their responses to the corresponding mail survey question, and by their responses to another interview question asking whether or not graduates were productive as soon as hired. Seventy-two percent of the interviewed employers answered yes.

Employers saw two primary weaknesses in graduates when they reported any. The first was a lack of on-the-job experience. The second was a lack of knowledge in their particular skill area. However, the nature of the sample and lack of breakdown by District 4 program makes it unwise to draw any firm conclusions from these comments.

FOOTNOTES

[1]See, for example, Asche, F. M. and Vogler, D. E. Assessing employer satisfaction with vocational education graduates. Columbus, OH: The National Center for Research in Vocational Education, 1980; Allan, R. G. and Gorth, W. P. Questions of efficacy: A review of state surveys. VocEd, April, 1979; Vogler, D. E. and Asche, F. M. Surveying employer satisfaction with occupational education: State of the art. Journal of Studies in Technical Careers, 1981, 3, 135-140.

APPENDIX A

METHODOLOGY

Table A-1: Number of Employees in Responding and Nonresponding Organizations

Table A-2: Number of Organizations Employing District 4 Graduates in Responding and Nonresponding Organizations

Table A-3: Industrial Classification of Surveyed and Interviewed Organizations

Table A-4: Location of Surveyed and Interviewed Organizations

Table A-5: Number of Employees in Surveyed and Interviewed Organizations

Table A-6: Position of Respondents in Surveyed Organizations and Position of Individuals Interviewed

EMPLOYER MAIL SURVEY

Instrumentation

A specialized instrument was developed to elicit information from area employers for the purposes of this study. An initial pilot instrument was developed in January 1982 and given to 50 employers attending a District 4 placement seminar in mid-February. From their responses and suggestions and from recommendations of Dr. Nowrasteh, a second pilot instrument was completed in late March. Further input was solicited from District 4 instructors, Kay Plantes of the Wisconsin Department of Development, and William Strang, Director of the Bureau of Business Research at the University of Wisconsin. The final instrument (see Appendix B) was completed in late April, approved by Dr. Nowrasteh.

The instrument is comprised of four parts. Part I requests general information about the employer and the respondent's position. Part II asks information relevant for placement of District 4 graduates and solicits ratings of their work performance. Part III seeks to find out what types of training employers may need for existing employees with inadequate skills, or employees who need new skills due to technological change. It also asks about training for new jobs and managers. Part IV attempts to gain data on employer's expectations for future hiring. Space was left at the end of the survey to encourage respondents' suggestions regarding ways District 4 might improve its services to employers.

Sample Selection

The selection of a truly random yet appropriate sample posed a formidable task, inasmuch as twelve counties and a select subset of industries constituted

the population of interest. The sampling procedure chosen involved the use of a computerized mailing list and entailed the following steps:

1. A list of all appropriate zip codes in the twelve counties of District 4 was generated.
2. Relevant industries were chosen by Standard Industrial Classification (SIC) code. The choice was based on such factors as whether the industry corresponded to a District 4 degree program, whether the industry was likely to hire District 4 graduates, and whether the industry was likely to utilize new machinery or technology. Not all relevant industries could be included due to fiscal limits on total sample size.
3. Using the Wisconsin edition of County Business Patterns, an approximate population count was calculated by SIC code for the five most populous District 4 counties, which would account for virtually all of the businesses.
4. Equal sample sizes for each SIC code were generated by taking the total number of businesses in an SIC category obtained above and dividing it by the value of "n" which would yield an approximate sample size of 35-40. For example, there were 84 banks in the five most populous counties, so "n" was set equal to 2.
5. The computer was instructed to search all zip codes for each SIC code, and then select every n^{th} business in that SIC code. If the population count was less than 40 for a specific SIC, the entire population was selected.
6. Approximately 1,400 firms were identified from the procedure above. To ensure that the addresses were up-to-date, each address was cross-checked against a current telephone book. Those not in the telephone book were discarded.

7. Each remaining firm was coded with a unique four-digit identifier and the SIC code. At the time of mailing, these numbers were transferred to the survey so that returned surveys could be identified.
8. In early June, 899 surveys were mailed along with a letter of explanation (see Appendix B) and a business reply envelope.
9. A second mailing went out in late June to nonresponding firms accompanied by a follow-up letter (see Appendix B).

Respondents

The instrument and sampling procedure took into account criticisms raised by Asche and Vogler in their review of similar employer mail surveys.[1] Previous studies were found to be limited because:

a. They typically result in low response rates ("often less than 20 percent")
b. They usually fail to assess possible nonrespondent bias
c. They often fail to control for "level of respondent"
d. They frequently have a high degree of "don't know" responses

The present study was carefully designed in an attempt to avoid these methodological pitfalls. A follow-up mailing was employed to increase the response rate, and a sample of nonrespondents was conducted to estimate nonresponse bias. An accompanying cover letter attempted to direct the survey to the most appropriate respondent. Data analysis was undertaken to examine if the level of respondent position influenced the results. The present section describes characteristics of the final sample of respondents and addresses the criticisms of prior mail surveys.

Response rate. Two hundred and ninety-nine organizations out of the original mailing of 899 returned surveys, representing a response rate of 33.3%.

Industries and location of respondents. Responding organizations are listed by industrial category in Table A-3. Respondents represent 52 communities in District 4 (see Appendix C). Table A-4 provides a summary of the number and percentage of organizations in each of the six areas of District 4.

Sample representativeness. It will be recalled that the sampling procedure was random, but not representative of all businesses in District 4, since only certain SIC codes were selected. Thus, it is inappropriate to compare the percentages of SIC responses or the distribution of organizations by number of employees to available population data. Instead, a telephone follow-up of non-respondents was conducted to determine sample representativeness. Nonresponding organizations were selected by pre-assigned identifier using a random number table. Two questions were asked of those selected: the number employed, and whether or not any were graduates of District 4.[2] Table A-1 shows the number of employees in responding and nonresponding organizations. Table A-2 shows the number of organizations employing District 4 graduates for both responding and nonresponding organizations.

TABLE A-1

NUMBER OF EMPLOYEES IN RESPONDING AND NONRESPONDING ORGANIZATIONS

	Responding Organizations		Nonresponding Organizations	
Number of Employees	Number of Organizations	Percentage	Number of Organizations	Percentage
1 to 9	122	42.4	27	51.9%
10 to 24	59	20.4	9	17.3
25 to 49	36	12.5	6	11.5
50 to 149	35	12.1	7	13.5
150 or more	37	12.8	3	5.8
	289[a]	100%	52	100%

[a]Ten respondents did not answer this question.

TABLE A-2

NUMBER OF ORGANIZATIONS EMPLOYING DISTRICT 4 GRADUATES IN RESPONDING AND NONRESPONDING ORGANIZATIONS

	Responding Organizations		Nonresponding Organizations	
	Number of Organizations	Percentage	Number of Organizations	Percentage
Yes	120	42.7	16	30.8
No	161	57.3	36	69.2
	281[a]	100%	52	100%

[a]Eighteen respondents did not answer this question.

Chi-square tests were performed on the data in both Tables A-1 and A-2 to determine if the null hypothesis (no difference between respondents and non-respondents) could be rejected. The results ($\chi^2 = 3.14$, d.f. 4, Table A-1; $\chi^2 = 2.1$, d.f. 2, Table A-2) indicated that in neither case could the null hypothesis be rejected ($p < .05$). Despite these statistical results, it is probable that our respondents slightly overrepresent large employers ($n \geq 150$) and underrepresent small employers ($n < 10$).

Respondent Position. Each mailing label was addressed to the "Owner/Manager" of the sampled organization and the letter accompanying the survey read in part: "If you are not familiar with all of the positions or training needs of your organization, pass it [the survey] along to the most appropriate person."

Table A-6 shows that the positions held by the persons actually responding to the survey varied substantially. (A list of the 69 "other" respondents can be found in Appendix D.)

The results of Table A-6 are potentially problematical since it has been argued that responses to a survey of the sort performed here may depend on the

position of the respondent.[2] To assess this possibility several statistical tests were performed (detailed results are reported in Appendix E). Chi-square tests suggest no differences in evaluations of District 4 graduates' work habits or in their occupational preparation as a function of respondent position. Additional tests suggest that respondent position was not related to perceptions of using District 4 services for technical training, interest in managerial training, or on expectations for future employment. Respondent position was, however, related to organization size as would be expected. Owners, presidents, vice presidents and line managers were more likely to be the respondent in small organizations; personnel or training managers were more likely to be the respondent in larger organizations. Overall then, the results do not suggest that the respondents position influenced the results and hence subsequent analyses were performed on all respondents.

EMPLOYER ON-SITE SURVEY

Rationale

In order to supplement the information obtained via the mail survey, on-site interviews were conducted by District 4 instructors with area employers. The rationale for this was fourfold.

First, mail surveys are limited due to their standardized response format. Employers may have comments of potential value to District 4, but if, due to researcher bias, appropriate questions aren't asked on the survey or responses are categorized, the information can be lost. Having employers respond to open-ended questions allows for more complete responses.

Second, utilizing District 4 instructors as interviewers allows employers to respond in a more technical and occupation-specific vein. Because of the occupational breadth of District 4 employees, a mail survey must be general.

District 4 instructors are able to focus, during an interview, on potentially valuable information due to their technical expertise.

Third, as a by-product of the interview process, District 4 instructors are apt to gain useful knowledge above and beyond that which is pertinent to this report. For example, instructors reported informally that they were able to integrate employer advice into their classroom activities, that their placement contacts were strengthened, and that knowledge of future trends in their technical area was enhanced.

Fourth, and potentially most significant, is the public relations value of having representatives of District 4 contact area employers. As shown in Section VI of this report, employers are much more likely to employ District 4 graduates if they have been contacted by a representative of District 4. Additionally, many employers remain unaware of what District 4 has to offer them with respect to such things as evening courses, on-site training, or assistance with training program design.

Instrumentation

A preliminary questionnaire was developed in late spring of 1982. The questionnaire was given to participating District 4 faculty and their comments were solicited. Based on the resultant remarks and suggestions, the final version was generated, and approved by Dr. Nowrasteh in June (see Appendix B).

The instrument has six parts. Part I concerns background information on employers and the interviewee. Part II consists of open-ended questions regarding how District 4 graduates obtained employment, what their strengths and weaknesses are, and whether or not they are productive when hired. Part III solicits employer perspectives on present training and training needs. Part IV seeks information regarding future areas in which employment is expected to increase or decrease. Part V looks at future training needs. Part VI consists of a ser-

ies of structured questions designed to obtain interviewer comments on the interview.

Sample Selection

The procedure for selecting employers to be interviewed differed substantially from the mail survey. No effort was made to generate a random sample which would be representative of District 4 employers. Rather, 54 employers were selected nonrandomly at the convenience of those District 4 instructors who elected to participate in the project. In most cases, instructors already had contacts within the targeted organizations. A list of employers and interviewers is provided in Appendix B.

Interviewer Preparation

To ensure a degree of uniformity in the interview process, interviewers were briefed by Dr. Nowrasteh in a meeting prior to the start of the visits to firms. In addition, a set of guidelines was given to each interviewer (see Appendix B).

Description of Participating Employers

Industries visited for on-site interviews. Table A-3 shows that on-site interviews were conducted in the automotive, data processing, and printing industries at a greater rate, and among all other identified industries at a lower rate than obtained in the mail survey.

Location of on-site interviews. As shown in Table A-4, 72% of the organizations visited were in Dane county, a slightly higher percentage than respondents to the mail survey. Other areas received proportionately less attention.

TABLE A-3

INDUSTRIAL CLASSIFICATION OF SURVEYED AND INTERVIEWED ORGANIZATIONS

	Mail Survey		On-Site Interviews	
Industry	Number of Organizations	Percentage	Number of Organizations	Percentage
Contractors	19	6.4	0	0
Manufacturing	114	38.1	17	31.5
Radio/TV/ Telephone	11	3.7	2	3.7
Wholesalers	11	3.7	1	1.8
Department Stores	17	5.7	0	0
Automotive	10	3.3	6	11.1
Financial Institutions	51	17.1	0	0
Data Processing	10	3.3	3	5.6
Electronics	4	1.3	0[a]	0[a]
Dental Technology	12	4.0	0	0
Hospitals/ Nursing Homes	33	11.0	3	5.6
Printing	0	0	8	14.8
Miscellaneous or Unknown	7	2.3	14	25.9
	299	100%	54	100%

[a]Electronics firms interviewed were either categorized as manufacturing or unknown due to unclear data on questionnaires.

TABLE A-4

LOCATION OF SURVEYED AND INTERVIEWED ORGANIZATIONS

	Mail Survey		On-Site Interviews	
Location[a]	Number of Organizations	Percentage	Number of Organizations	Percentage
East Dane	85	28.5	21	38.8
Reedsburg	36	12.0	4	7.4
West Dane	94	31.4	18	33.3
Fort Atkinson	27	9.0	3	5.6
Watertown	19	6.4	3	5.6
Portage	34	11.4	1	1.9
Out of District or Unknown	4	1.3	4	7.4
Total	299	100%	54	100%

[a]See Appendix C for a breakdown of the communities in each category.

Number of employees in interviewed organizations. Interviewed employers were larger (as measured by number of employees) than those who responded to the mail survey as illustrated in Table A-5.

TABLE A-5

NUMBER OF EMPLOYEES IN SURVEYED AND INTERVIEWED ORGANIZATIONS

	Mail Survey		On-Site Interviews	
Number of Employees	Number of Organizations	Percentage	Number of Organizations	Percentage
1-9	122	42.4	10	18.5
10-24	59	20.4	8	14.8
25-49	36	12.5	7	13.0
50-149	35	12.1	12	22.2
150 or more	37	12.8	17	31.5
Total	289[a]	100%	54	100%

[a]10 respondents did not answer this question.

Employment of District 4 graduates in organizations visited for on-site interviews. In contrast to the mail survey where 43% of responding organizations employed District 4 graduates, 91% of interviewed employers reported employing District 4 graduates.

Positions of individuals interviewed. Positions of individuals interviewed within firms also appeared to differ from those who responded to the mail survey as shown in Table A-6.

TABLE A-6

POSITION OF RESPONDENTS IN SURVEYED ORGANIZATIONS AND POSITION OF INDIVIDUALS INTERVIEWED

	Mail Survey		On-Site Interview	
Position	Number of Organizations	Percentage	Number of Organizations	Percentage
Owner	69	23.6	6	11.1
President or Vice President	82	28.1	5	9.3
Personnel or Training Mgr	50	17.1	21	38.9
Manager	22	7.5	15	27.8
Other[b]	69	23.6	7	13.0
Total	292[a]	100%	54	100%

[a]Seven respondents did not answer this question.

[b]See Appendix D for a list.

Interviews were conducted more frequently with personnel or training managers and general managers and less frequently with other identified respondents than in the mail survey.

FOOTNOTES

[1]A total of 86 telephone calls to nonrespondents were made. The 34 organizations that did not answer the two questions fall into the following categories:

Answering machine	2
Unable to answer questions	5
Did not answer telephone call	15
Refused to answer	2
Number out of service	7
Out of business	1
Other	2
	34

[2]Asche, F. M. and Vogler, D. E. Assessing employer satisfaction with vocational education graduates. Columbus, OH: The National Center for Research in Vocational Education, 1980.

APPENDIX B

INSTRUMENTATION

Mayor and City Manager Survey

- Sample letter
- Instrument

Mail Survey

- Instrument
- Initial letter
- Follow-up letter

On-Site Interviews

- Questionnaire
- Interviewers and Interviewed Employers
- Guidelines
- Letter to Employers

August 26, 1982

Mr. Roderic J. Schroder
PO Box 192
Columbus, WI 53925

Dear Mr. Schroder:

The Vocational Technical and Adult Education District No. 4 has asked us to briefly determine what important changes in employment are likely in our area in the next three years. Because mayors or other chief city officials are likely to be aware of changes that may occur, we have enclosed a brief questionnaire asking your best judgment about major changes in prospect over this period.

This should only take a minute or so of your time. Your cooperation will be appreciated. Any responses you give will not be associated with your name and will be interpreted as simply a judgment of what is likely to happen.

Thank you for your cooperation. Please return the questionnaire in the postage-paid business reply envelope that is provided.

Sincerely,

William A. Strang
Director

Enclosure

QUESTIONNAIRE

Brief Survey of Major Employment Changes
Expected by 1985

1. Name of your city _____

The following questions relate to changes in employment of 50 employees or more.

2. Are there any companies planning to open new operations in your city by 1985?

No ___ Yes ___

Company Name	Probable Employment (your best estimate)
_____	_____
_____	_____
_____	_____

3. Do any companies now located in your city plan any major additions in employment by 1985?

No ___ Yes ___

Company Name	Probable Added Employment (your best estimate)
_____	_____
_____	_____
_____	_____

4. Do any companies now located in your city plan any major cutbacks in employment by 1985?

No ___ Yes___

Company Name	Probable Lost Employment (your best estimate)
_____	_____
_____	_____
_____	_____

Please return the questionnaire in the postage-paid business reply envelope that is provided.

MADISON AREA TECHNICAL COLLEGE

Area Vocational, Technical and Adult Education/District No. 4
Fort Atkinson • Madison • Portage • Reedsburg • Watertown

EMPLOYER SURVEY

PART I. EMPLOYER INFORMATION

_____ SIC _____

Firm or organization name _____

Address/City/Zip _____

Approximate number of employees at this location _____

Your position in this firm:

☐ Owner ☐ President or Vice President ☐ Personnel Manager ☐ General, District or Area Manager ☐ Training Director
☐ Other (Please specify) _____

PART II. DISTRICT 4 GRADUATES

1. Has a District 4 representative (teacher, administrator, counselor) ever contacted you about employing their vocational graduates in permanent part-time or full-time positions?
   ☐ Yes ☐ No ☐ Don't know
2. Do you contact District 4 when you have an opening?
   ☐ Yes ☐ No
3. Has a District 4 graduate ever applied for a position with your organization?
   ☐ Yes ☐ No ☐ Don't know
4. Do you currently employ or have you ever employed District 4 graduates?
   ☐ Yes, Number presently employed _____
   ☐ No (Please skip to PART III)

   Considered as a group, the work habits of persons trained at District 4 who are now or have been employed by your firm or industry could best be described as:

Excellent	Good	Satisfactory	Fair	Poor

   ☐ Don't know

   How would you rate the overall occupational preparation of District 4 graduates in relation to that of other employees without such training? District 4 graduates are:

Far less prepared	Less prepared	About the same	Better trained	Far better trained

   ☐ Don't know

5. How were District 4 graduates hired? (Check as many categories as apply.)
   ☐ Graduate's initiative ☐ District 4 placement office ☐ Through District 4 instructor ☐ Current employee referrals
   ☐ Other (Please specify) _____
   ☐ Don't know

PART III. EMPLOYER TRAINING NEEDS

To help design effective programs, District 4 needs to know what training may be needed for:

A. New employees
B. Employees with inadequate skills
C. Employees in jobs which are expected to change
D. New jobs (in your firm) resulting from technological changes or equipment purchases
E. Managers and supervisors

(continued)

A. New Employees

1. Does your firm have a formal training or orientation program for new employees?
   ☐ Yes ☐ No

2. Would your firm be interested in working with District 4 to improve your present orientation or develop one?
   ☐ Yes ☐ No

B. Employees with Inadequate Skills

3. Please list any occupations for which training may currently be needed due to inadequate skills on the part of employees or because it is difficult to recruit adequately trained employees.

   Then indicate (using the codes which follow) the training strategy you expect to follow.

   1 = No need for outside assistance, internal training program adequate.
   2 = Off-site classes, seminars, or workshops using outside assistance.
   3 = On-site classes, seminars, or workshops using outside assistance.
   4 = Hire new employees with needed skills if possible.

   If you feel District 4 might assist you in this training, check the appropriate space

Occupation	Skills and/or Equipment for which Training is Necessary	Training Strategy (1, 2, 3, or 4)	District 4 assistance might help

C. Jobs Which Are Expected To Change

4. Please identify any existing occupations in your firm affected by technological change, new equipment purchases, or other changes for which employees will have to acquire *new skills*.

   Then indicate (using the codes in question 3) which training strategy you expect to follow.

   If you feel District 4 might assist you in this training, check the appropriate space.

Occupation	Skills and/or Equipment for which Training is Necessary	Training Strategy (1, 2, 3, or 4)	District 4 assistance might help

(continued)

D. New Jobs

5. Please identify those occupations and accompanying skills which your firm *does not presently have* but expects to need in the next three years due to technological changes or equipment purchases.
Then indicate (using the codes in question 3) which training strategy you expect to follow.
If you feel District 4 might assist you in this training, check the appropriate space.

Occupation	Skills and/or Equipment for which Training is Necessary	Training Strategy (1, 2, 3, or 4)	District 4 assistance might help

6. If you indicated above that District 4 training might be of use to your firm for one or more occupations, please provide the name and phone number of an individual who could be contacted by District 4:

Name _____ Phone _____

E. Management Training

7. Would managers in your firm consider attending the following seminars or workshops held at District 4 facilities? (Check if applicable.) Please list specific areas if they represent a need in your organization.

__New product development
__Risk management
__Cost accounting
__Ratio analysis
__Profit planning
__Auditing
__Franchise index/profile
__Salesman training
__Purchasing
__Inventory control
__Credit and collection
__Capital expenditure analysis
__Asset management
__Retail display
__Retail site selection
__Exporting
__Relocation
__Breakeven analysis
__Cost control
__Marketing strategy
__Recruitment and selection
__Training and development
__Affirmative Action and EEO
__Security
__Packaging
__Physical distribution
__Personnel policies
__Labor relations
__Production scheduling
__Quality control
__Data processing
__Strategic planning
__Advertising
__Compensation
__Benefits
__Introduction to patents
__Product safety
__Decision making and problem solving techniques
__Time management
__Supervisory skills
__Direct mail marketing
__Stress management
__Other _____

8. When would be the best time to offer these seminars?
(Please number in order of preference, or indicate if you have no preference.)

__Morning
__Afternoon (1:00-3:00)
__Late afternoon (3:30-6:00)
__Evening (6:00-10:00)
__Saturday
__No preference

9. Would it be important to limit participation to representatives *in your industry?*
☐ Yes ☐ No

10. What other program characteristics would make participation more attractive?

_____

_____

_____

(continued)

PART IV. EMPLOYMENT EXPECTATIONS

1. By January 1, 1985, if the current economic climate *improves*, does your firm plan to:
   - ☐ Expand employment (by percent)
   - ☐ Keep employment the same
   - ☐ Reduce employment (by percent)
2. By January 1, 1985, if the current economic climate *worsens*, does your firm plan to:
   - ☐ Expand employment (by percent)
   - ☐ Keep employment the same
   - ☐ Reduce employment (by percent)
3. By January 1, 1985, if the current economic climate *remains as it is*, does your firm plan to:
   - ☐ Expand employment (by percent)
   - ☐ Keep employment the same
   - ☐ Reduce employment (by percent)
4. What factors do you feel will be most important in determining whether or not your business expands *at this location* during the 1982-1985 period?
   The most important factors will be _____

Please use the space below for any additional remarks concerning how District 4 could assist your organization.

Thank you for your participation!

A business reply envelope is provided for your convenience.

University of Wisconsin Madison

Graduate School of Business
1155 Observatory Drive
Madison, Wisconsin 53706

Bureau of Business Research

June 22, 1982

Dear Employer:

The Bureau of Business Research at the University of Wisconsin-Madison is conducting a survey on behalf of Madison Area Technical College to determine the skill and training requirements of local organizations. The information gathered will help in deciding which skills and occupations will be most needed in the future and which courses and programs will best meet the present and future needs of your firm. The information you provide will be helpful to Madison Area Technical College whether or not you currently employ or plan to employ graduates.

Please take the next ten minutes to complete the enclosed questionnaire. If you are not familiar with all of the positions or training needs of your organization, pass it along to the most appropriate person. The responses from your firm will be seen only by researchers at the Bureau of Business Research. The confidentiality of your answers will be completely protected.

A business reply envelope is provided for your convenience.

Thank you for your valued assistance!

Sincerely,

William A. Strang

William A. Strang
Director
Bureau of Business Research

encs.

University of Wisconsin Madison

Graduate School of Business
1155 Observatory Drive
Madison, Wisconsin 53706

Bureau of Business Research

July 16, 1982

Dear Employer:

We need your assistance!

Several weeks ago the Bureau of Business Research at the University of Wisconsin-Madison mailed your firm an important questionnaire. We have not received your reply, and ask that you take a few minutes now to complete the enclosed duplicate.

The results of this survey will be used by Madison Area Technical College in planning courses and developing training strategies for area firms. Your reply will be useful regardless of whether or not you employ MATC graduates or make use of MATC services. All replies will be confidential, seen only by the Bureau of Business Research.

If you are not familiar with the various occupations in your firm, please pass the questionnaire on to the most appropriate person. A business reply envelope is enclosed for your convenience.

Thank you for your help. The information provided by the few minutes you invest in completing the survey will be extremely valuable both to MATC and area firms.

Sincerely,

Bill Strang

William A. Strang
Director, Bureau of Business Research

WAS:jgk

Enclosure

ON-SITE INTERVIEW QUESTIONNAIRE

I. BACKGROUND INFORMATION

Interviewer's Name _____

Department _____

Phone _____ Date of Interview _____

Company Name _____

Address _____

City _____ Zip _____

Principal Business Activity _____

Person Interviewed _____

Title _____

Note to Interviewer:

Please indicate the type of unit your interview covers (i.e., department, entire plant, entire company, etc.) and the number of employees in the unit.

Unit Type _____ Number of Employees _____

II. EXPERIENCE WITH MATC GRADUATES

1. Do you have any employees that are MATC graduates?

   _____ Yes. Number employed _____

   _____ No. Skip to Section III.

2. How were these graduates employed?

   _____ Graduate's initiative

   _____ Placement office

   _____ Through instructor

   _____ Employee referrals

   _____ Newspaper

   _____ Other _____

   _____

3. Have you had firsthand exposure to the graduates' work performance?

   _____ Yes

   _____ No

4. Considered as a group, what are your impressions of their preparation for work? (Record both strengths and weaknesses.)

5. Are MATC graduates productive as soon as hired?

_____ YES

If not, why (check as many as are appropriate)

_____ Inadequate technical skills

_____ Inadequate communication skills

_____ Difficulty in adapting to work rules

_____ Slow learner/low ability

Elaborate on above and/or other:

III. CURRENT TRAINING/TRAINING NEEDS

1. Do you currently have skill training for new or existing employees or do you need such training?

_____ YES

_____ NO. Skip to Section IV.

2. Describe the training or the training needed.

3. Could MATC assist with this training? (Possibilities: train the trainers, have employer call instructor for advice, have MATC design plant specific training, etc.)

IV. EMPLOYMENT CHANGES

1. Do you expect to reduce employment in certain skill areas in the next 3-5 years?

   If yes,

Skill Area	No. of Employees

2. What new and additional kinds of employees (skills) will you be needing in the next 3-5 years?

Skill Area	No. of Employees

3. Describe the industrial changes (i.e., equipment, technological, etc.) that could lead to these future reductions or increases in demand for skills.

V. FUTURE TRAINING NEEDS

1. Do you expect that your skill needs over the next 3-5 years will result in new training efforts in your firm? (Describe)

2. Can MATC assist in these training efforts?

6

INTERVIEWER'S COMMENTS (To be filled out after the interview)

1. Comment on current strengths and weaknesses of MATC graduates for this firm.

2. Estimate the change in the number of employees and skill areas of this firm over the next 3-5 years.

3. Did your interview suggest changes in current MATC training? (Explain)

4. Did your interview suggest changes for future MATC training to meet this firm's needs in 3-5 years? (Explain)

DISTRICT 4 INTERVIEWERS AND INTERVIEWED EMPLOYERS

Greg Ericson, Wood Technology
American Woodworking, Montello
Windsor Homes Inc., Madison
Wick Building System Inc., Mazomanie

Floyd Judd, Electronics
Tracor Northern Inc., Middleton
ITT Courier Terminal Systems, Madison
Nicolet Instruments, Madison
Wisconsin Power and Light, Madison
Madison Gas and Electric, Madison

Gene Solberg, Electronics
Eagle Signal, Baraboo
Baraboo Equipment Corp., Baraboo
University of Wisconsin-Space Science, Madison

Jim Rowsam, Machine Trades
Graber Company, Middleton
Wisco Industries, Oregon
Madison Kipp, Madison
Sieders Manufacturing and Machine Inc., Madison
Flambeau Tool Co., Baraboo
Baker Manufacturing Company, Evansville
EVCO, DeForest

Bob Johnson, Electronics
Teletype Corporation, Madison
Wisconsin Telephone Company, Milwaukee
Jamesway, Fort Atkinson
Norland Corporation, Fort Atkinson
Gordon Flesch Company Inc., Madison
Electric Motors Unlimited, Madison

J. G. Hale, Electronics
Gilson Medical Electronics, Middleton
Carnes, Verona
Digital Equipment Corporation, Madison
Hamlin Inc., Lake Mills

Doug Redsten, Job Placement
Webcrafters, Madison

Dan Beyersdorf, Electronics
AMTELCO, Madison

Bob Heimerl, Electronics
Eaton Corporation/Durant Products, Watertown
Oscar Mayer Foods Corporation, Madison
Ohio Medical Company, Madison
Control Products, Watertown

DISTRICT 4 INTERVIEWERS AND INTERVIEWED EMPLOYERS

(continued)

John Birong, Electronics
A. B. Dick, Madison
General Electric-Medical Systems Division, Madison
NCR, Madison
Chief Video and Electronics, Madison
GI Supply, Madison

Dick Virtue, Automotive Technology
Ken's Brake and Alignment, McFarland
Jon Lancaster Chevrolet, Madison
Terry McCaughey's Car Care Center, Madison
Thorstad Chevrolet, Madison
Drovak Chevrolet Inc., Stoughton
Anderson-McGinley Inc., Stoughton

Gary Gade, Graphic Arts
Royle Publishing Co., Sun Prairie
Tony's Instant Litho Printing, Madison
Suttle Press Inc., Waunakee
Webrafters, Madison
Wells Printing Co., Madison
Litho Productions Inc., Madison
Widen Colourgraphics Ltd., Madison
W. D. Hord Company, Fort Atkinson

SUGGESTED GUIDELINES FOR CONDUCTING ON-SITE INTERVIEWS

1) Before the interview, read through the questionnaire to make sure you know the questions to be asked. Feel free to ask questions in your own words, but be sure to ask all questions on the questionnaire. Follow up on interesting responses.

2) You may also add questions or pursue areas of personal interest.

3) At the interview, introduce yourself and explain what you teach.

4) Begin each interview by briefly explaining its purpose in your own words. Some points to cover:

   a) MATC is trying to determine if current grads can be trained more effectively.

   b) MATC is trying to anticipate changing skill requirements resulting from business changes. This could result in new programs or changes in existing programs.

   c) MATC is trying to find out if there are new or additional ways it may serve the business community.

5) Be sure to make the distinction between what the employers think MATC can/should do (write these responses on the questionnaire) and what you think MATC can/should do based on the employer's needs (write your ideas on the interviewer's comments sheet).

6) While the interview is still fresh in your awareness, answer the four questions at the end of the questionnaire.

7) Return the completed questionnaire to Dr. Dar Nowrasteh, 266-5071.

AREA VOCATIONAL, TECHNICAL
and ADULT EDUCATION/DISTRICT No. 4
211 North Carroll Street, Madison, Wisconsin 53703

NORMAN MITBY, District Director

Dear Participant:

Madison Area Technical College has always been vitally interested in seeking out new ways to serve the business community, as well as improve our existing services. The interview that you are taking part in is one important activity that will assist us in accomplishing these objectives:

1. MATC is trying to determine if current graduates can be trained more effectively.

2. MATC is trying to anticipate changing skill requirements resulting from business changes. This could result in new programs or changes in existing programs.

3. MATC is trying to find out if there are new or additional ways it may serve the business community.

The information you provide will help us to evaluate our current programs, develop new ones, and discover other avenues through which we may be of service to you.

With the intention of promoting an ongoing relationship, we encourage you to maintain contact with your interviewer in the future for technical advice or assistance, as well as for placement purposes.

Thank you for your valued participation.

Sincerely,

Norman P. Mitby
District Director

NPM:DN:nc

APPENDIX C

NUMBER OF ORGANIZATIONS RESPONDING TO MAIL SURVEY FROM EACH COMMUNITY

AREA 1: EAST DANE (28.8%)

City/Town	No. of Org.
Cottage Grove	1
DeForest	3
McFarland	3
Stoughton	11
Sun Prairie	10
Windsor	1
Madison (53703)	16
Madison (53704)	24
Madison (53714)	6
Madison (53716)	9
Other	1
TOTAL	85

AREA 2: REEDSBURG (12.2%)

City/Town	No. of Org.
Black Earth	1
Dodgeville	3
Lone Rock	1
Mazomanie	1
Plain	1
Prairie du Sac	2
Sauk City	3
Spring Green	1
Baraboo	12
Lake Delton	1
LaValle	1
Loganville	1
Reedsburg	6
Wisconsin Dells	1
Wonewoc	1
TOTAL	36

APPENDIX C (continued)

AREA 3: WEST DANE (31.9%)

City/Town	No. of Org.
Belleville	2
Brooklyn	1
Cross Plains	2
Dane	1
Middleton	7
Mount Horeb	5
New Glarus	1
Oregon	1
Verona	3
Waunakee	3
Madison (53701)	10
Madison (53705)	13
Madison (53706)	3
Madison (53707)	6
Madison (53708)	1
Madison (53709)	1
Madison (53711)	8
Madison (53713)	6
Madison (53715)	11
Madison (53719)	9
TOTAL	94

AREA 4: FORT ATKINSON (9.2%)

City/Town	No. of Org.
Palmyra	1
Sullivan	2
Cambridge	1
Deerfield	2
Fort Atkinson	14
Jefferson	7
TOTAL	27

AREA 5: WATERTOWN (6.4%)

City/Town	No. of Org.
Johnson Creek	1
Watertown	12
Lake Mills	5
Waterloo	1
TOTAL	19

APPENDIX C (continued)

AREA 6: PORTAGE (11.5%)

City/Town	No. of Org.
Portage	10
Arlington	1
Columbus	7
Fall River	2
Montello	4
Pardeeville	2
Randolph	3
Westfield	1
Wyocena	1
Neshkoro	3
TOTAL	34

APPENDIX D

"OTHER" RESPONSES: POSITION OF RESPONDENT TO MAIL SURVEY

Manager
Branch manager (3)
Store manager (5)
Office manager (5)
Cashier (3)
Bookkeeper (2)
Secretary (3)
Partner (2)
Bookkeeper/secretary
Head teller/bookkeeper
Controller
Chief engineer
Secretary/treasurer (2)
Plant supervisor
Marketing manager
Laboratory assistant director
Administrator (5)
Corporate director of industrial relations
Broker
Superintendent
Hospital administrator
Staffing administrator (2)
Data center manager
Assistant treasurer
Treasurer/manager
Savings manager
Administrative manager
Trustee
Personnel management specialist
Personnel officer
Administrative assistant (2)
Assistant director
Consultant
Personnel administrator
Personnel director
Clinic manager
Director, systems and programming
Secretary/controller
Lab manager
Plant manager
Assistant manager/trainee
Employment assistant
Assistant manager
Office manager's assistant
Executive director
Office manager/accountant

APPENDIX E

EFFECT OF RESPONDENT POSITION ON RESULTS

Table E-1: Ratings of Work Habits as a Function of Respondent Position

Table E-2: Ratings of Occupational Preparation as a Function of Position

Table E-3: Position of Respondent and Percentage who Believe District 4 Could Assist with Training

Table E-4: Position of Respondent and Percentage Interested in Managerial Seminars

Table E-5: Respondent Position and Employment Expectations for Three Possible Scenarios of Economic Climate

Table E-6: Percentages of Employees in Responding Organizations Arranged by Respondent Position

TABLE E-1

RATINGS OF WORK HABITS AS A FUNCTION OF RESPONDENT POSITION

Respondent Position	Percentages of Ratings: Excellent or Good[b]	Satisfactory or Poor	Row Total
Owner	17.8	3.4	21.2
President or Vice President	18.6	5.1	23.7
Personnel or Training Manager	25.4	1.7	27.1
General District or Area Manager	5.1	0.0	6.0
Other	18.6	4.2	22.9
Column Total	85.6	14.4	100.0%[a]

[a] N = 118

[b] Ratings were collapsed into two categories in order to perform statistical tests.

TABLE E-2

RATINGS OF OCCUPATIONAL PREPARATION
AS A FUNCTION OF POSITION

Respondent Position	Percentages of Ratings: Better Trained[b]	Same or Less Prepared	Row Total
Owner	15.2	4.8	20.0
President or Vice President	15.2	10.5	25.7
Personnel or Training Manager	22.9	3.8	26.7
General, District or Area Manager	2.9	1.0	3.8
Other	15.2	8.6	23.8
Column Total	71.4	28.6	100.0%[a]

[a] N = 105

[b] Ratings were collapsed into two categories in order to perform statistical tests.

TABLE E-3

POSITION OF RESPONDENT AND PERCENTAGE WHO BELIEVE DISTRICT 4 COULD ASSIST WITH TRAINING[a]

Position	Assistance with Training for Existing Employees		Assistance with Training in New Skills		Assistance with Training for New Jobs	
	Yes	No	Yes	No	Yes	No
Owner	3.1	20.5	1.0	22.6	.7	22.9
President or Vice President	4.5	23.6	2.4	25.7	2.1	26.0
Personnel or Training Manager	4.8	12.3	2.4	14.7	1.0	16.1
General, District, or Area Manager	1.4	6.2	1.0	6.5	0.3	7.2
Other	2.7	20.9	2.1	21.6	1.7	21.9
	16.4	83.6	8.9	91.1	5.8	94.2

[a]N = 292

TABLE E-4

POSITION OF RESPONDENT AND PERCENTAGE INTERESTED IN MANAGERIAL SEMINARS[a]

Position	Interest	No Interest	Row Total
Owner	14.0	9.6	23.6
President or Vice President	13.7	14.4	28.1
Personnel or Training Manager	6.5	10.6	17.1
General, District, or Area Manager	4.8	2.7	7.5
Other	11.0	12.6	23.6
Column Total	50.0	50.0	100.0

[a]N = 292

TABLE E-5

RESPONDENT POSITION AND EMPLOYMENT EXPECTATIONS FOR THREE POSSIBLE SCENARIOS OF ECONOMIC CLIMATE

	Improved Climate[a]			Same Climate[b]			Worse Climate[c]		
Position	Expand	Same	Reduce	Expand	Same	Reduce	Expand	Same	Reduce
Owner	8.6	12.9	.9	2.2	18.2	1.3	1.7	13.9	6.5
President or Vice President	17.7	10.8	.4	4.9	21.8	2.2	2.6	18.7	7.8
Personnel or Training Manager	6.0	12.1	0	2.2	14.7	1.8	0.9	10.0	7.8
General, District, or Area Manager	4.3	3.4	0	2.2	5.8	0	.4	5.2	2.2
Other	9.9	12.5	0.4	3.6	16.0	3.1	2.2	13.9	6.1
	46.6	51.7	1.7	15.1	76.4	8.4	7.8	61.7	30.4

[a] $N = 232$

[b] $N = 225$

[c] $N = 230$

TABLE E-6

PERCENTAGES OF EMPLOYEES IN RESPONDING ORGANIZATIONS
ARRANGED BY RESPONDENT POSITION

Number of Employees	Owner	President/ Vice President	Personnel/ Training Manager	General, District, or Area Manager	Other	Row Total
1 to 9	17.3	10.9	1.4	4.2	8.1	41.9
10 to 24	3.9	8.5	2.1	0.4	6.0	20.8
25 to 49	1.1	3.9	2.5	1.8	3.2	12.3
50 to 149	1.1	3.2	2.5	1.1	4.2	12.0
150 or more	0.4	1.4	8.8	0	2.5	13.0
Column Total	23.6	27.8	17.3	7.4	23.9	100.0%[a]

[a] N = 284

APPENDIX F

SKILL TRAINING NEEDED BY DISTRICT 4 EMPLOYERS

Current Jobs

Sales representatives, advertising
Sales associates, talk to customers, appearance, arithmetic
Ad salesperson
Customer contact
Sales engineer
Marketing
Supervisory, people and time management
Management (8)
Buyers
Office manager accounting/computer (2)
Foreman, methods improvement, supervisory skills, motivation, quality
Broker
Payroll clerk, computer training
Underwriter
Accountant (4)
Reconciler
Office administrator, purchasing, production control, inventory control
Director
Public relations assistant, writing, communication layout
Bookkeeping
Credit and collection
Secretary, typing shorthand (4)
Switchboard operator
Office clerk, calculator, adding machine, typewriter, teletype, arithmetic
General office (4)
Receptionist
Lab (3)
Nurses aide (5)
Licensed practical nurse
Registered nurse
Dental technician (5)
Respiratory therapist
Hospital administrator
Nursing
Dietary aides
Medical records
Computer programmer (4)
General computer (3)
Data entry (2)
Programmer/analyst
Operator (4)
Word processing (6)
Cement finishers (2)
Crane operators
Heavy equipment operator
Redi-mix truck driver
Machinist (3)

Tool grinder (2)
Welding (5)
Tool and die (3)
Punch press set-up and operation
Cable TV technician, electronic theory
Electronic technician (3)
Teller (6)
Loan officer
Banker, financial counseling, personal banking
General banking (3)
Cross sellings
Wood mill machine operator, reading route, set-up
Carpentry
Joiner
Cabinetmaker
Finishing
Assembly
High speed production woodworking machine operators
Moulder operators
Machine operators, wide belt sanders, saws, routers
Hand sanders
Retail salesperson (4)
Catalog associate
Auto metal man
Body shop technicians
Auto technicians
Truck mechanic
Auto mechanic, gas and diesel
Truck, diesel mechanics
Electrician (3)
Lab sciences
Press operator, four color
Sorter/printer operator, high speed printers and document sorters
Engraving
Graphics
Magazine editor
Print errand person
Newswriter, community journalism training
Copywriter
Reporter
Newspaper layout
Savings counselor
Painter (2)
Quality assurance
Quality control inspector
Sign painter
Maintenance mechanic (4)
Skilled maintenance, welding, electronics
Maintenance mechanic, hydraulic, pneumatic and electrical skills
Brazer
Sheet metal workers
Winding
Mechanical trades
Fire and safety

Refrigeration
Rubber chemistry
Spray fireproofer
Foam mechanic
Molding technician
Service technician
CAD/CAM drafting
Mechanical and electrical drafting
Farm-oriented technician
Plumbing
Photographer
Construction estimator, knowledge of architectural, structural drawings
House manager
Social worker
Inspector
Packing
Housekeeping
Cook
Laundry worker
Food service worker
Laborer, set forms, dig footings
Warehouse person
Seamstress

Jobs Which are Expected to Change

Teller, automated teller machines (4)
Teller, microcomputer (5)
Accounting, bank clerk, data entry training
Bank investment officer
Bank loan officer
Bank bookkeeper
Teller (2)
Bookkeeper, CRT machines (2)
Accounting skills
Office manager, bookkeeping, typing
Computer operator training (6)
Computer programming (4)
Data entry (3)
Programmer/analyst
Microcomputer
Computer office (2)
General computer (3)
Secretary
Word processing (12)
Computer numerical control (3)
Truck mechanic, caterpiller, diesel
Auto mechanic, motor and body repair, fleet operations, diesel knowledge
Auto brazing
Auto body, bench unibody
Engineering, microprocessing, robotics, electronics
Electronic technology, high (10-15 volt) technology
Electronic technician (3)

Electronic engineer
Electronic instrument repair
Hospital information management system
Registered nurse (3)
Nurse's aide (3)
Licensed practical nurse (2)
Tissue culture
Sales (2)
Desk clerk
Bartender
Waitress
Farm machinery operators
CAD/CAM draftsman
Spray foam equipiment
Spray coating equipment
Cold heading
Automatic fire suppression
Computerized stamping
Punch press, compound/progressive dies
Offset printing
Farm mechanic
Welding, electrical, maintenance (2)

New Jobs

Computerized binding machinery
Proof machine operator
Draftsman/engineer
Tube bending
Wood working machinery
Energy management consultant
Customer service skills
Estimators
Electronic technicians
Solid state controls
CNC experience and familiarity with advanced machine tools
CNC programmers (2)
Heavy equipment operators
Speech therapy and occupational therapy technicians
Secretarial
Foreman
Marketing director (2)
Sales (3)
Dental technician
Radiology, ultra sound technology, nuclear medicine
Nursing assistant, training in home health care
Administrative, business machines, computers, typing
General purchasing skills
Productivity control
Investment specialist
Cost accountant
Computer programming (5)
Microcomputer operations (3)

General computer (4)
Teller, computer-related machines (3)
Word processing (3)
Auto technology, working with computerized Sun machine

APPENDIX G

INTEREST IN MANAGEMENT SEMINARS BY FUNCTIONAL AREA

General Management (25.3%)	Number Indicating Interest
Supervisory skills	73
Time management	56
Decision making and problem solving	51
Strategic planning	17
Stress management	46
	243

Accounting/Finance (23.0%)	
Capital expenditure analysis	19
Credit and collection	44
Cost control	36
Cost accounting	32
Breakeven analysis	19
Profit planning	31
Ratio analysis	17
Auditing	7
Asset management	16
	221

Human Resources (18.5%)	
Recruitment and selection	28
Training and development	33
Personnel policies	35
Affirmative action and EEO	24
Compensation	22
Benefits	15
Labor relations	21
	178

Production (7.1%)	
Inventory control	27
Quality control	22
Physical distribution	1
Production scheduling	12
Product safety	6
	68

APPENDIX G continued

Marketing (15.3%)	Number Indicating Interest
Packaging	6
Exporting	6
Direct mail marketing	15
New product development	30
Salesman training	29
Advertising	28
Marketing strategy	28
Retail display	5
Retail site selection	0
	147

Other (10.8%)	
Data processing	29
Risk management	28
Franchise index/profile	3
Introduction to patents	8
Security	12
Relocation	3
Purchasing	21
	104

APPENDIX H

"OTHER" RESPONSES: HOW DISTRICT 4 GRADUATES WERE HIRED

Job Service (2)
Apprenticeship program (4)
Newspaper ads (5)
Employment agency (3)
Hired after working part-time (3)
Respondent was graduate of District 4 (1)
Organization contacted District 4 (5)
U.S. Office of Personnel Management (1)
Position posted (1)
State Civil Service exam (1)
Other (2)

APPENDIX I

SUMMARIES OF RESPONSES TO REQUEST: "Please use the space below for any additional remarks concerning how District 4 could assist your organization."

Organization too small for reply to be useful (13)
Difficult for firm to forecast needs
District 4 welding department was cooperative and helpful
Interested in on-site assistance
District 4 graduates well-trained
Hold CATV technician course with technical orientation
Hold one semester course in RPG II and III for students
District 4 programs are worthwhile and necessary
Need for graduates with basic skills, good work ethics, desire for advancement
Community journalism program is good
Need for secretarial science graduates
Always looking for good truck mechanics
Very pleased with welding course graduates
No need for outside assistance
Most employees from Milwaukee Area Technical College, some trained by us
Will need training as new equipment is purchased
Hires only experienced workers
Parent company provides extensive training
Placement office at District 4 uncooperative in publicizing part-time teller positions; looking for applicants with some college, self-confidence, good communication skills, good grooming, good handwriting, and spelling
Able to train employees on-the-job
Have internal training program
Unlikely to use District 4 seminars, have regional training center
Questions difficult to answer
Make sure graduates learn basics, retain over time
District 4 should develop dental technology school
Employees come to firm already trained, or we train; need medical secretaries and nurses from District 4
Employees have little knowledge of technical theory; firm uses "fear and bribery" to teach work habits
Keep up the good job
Interested in District 4 seminars
Training program essential for new and existing employees
Would have hired sheet metal workers if available
Send announcements of seminars, firm is interested
Firm plans to close later in year
Stress proficiency in "3 R's"
Our business requires highly specialized training in orthopedic appliance application, anatomy, and related subjects; nearest available school is Northwestern University
MATC grads are doing well
MATC grads have exaggerated opinion of their initial worth; feel their learning is over after graduation
Firm satisfied with MATC grads; 10% of workforce attends annually
Get an envelope to fit the survey
On-the-job training is best for salespeople

APPENDIX I continued

Recently hired, cannot answer questions
Direct questions to corporate headquarters in Milwaukee
Call firm if they can be of assistance
Management training seminars would be beneficial
Would like more information on management seminars
Dependability is most important--how can it be taught?
Randolph employees won't drive to Madison, would prefer to go to Beaver Dam, but aren't allowed to
Thanks
Haven't had luck with younger generation, undependable, only interested in wage

ERIC® CLEARINGHOUSE FOR
JUNIOR COLLEGES
UNIVERSITY OF CALIFORNIA

FEB 17 1984

8118 Math-Sciences Building
Los Angeles, California 90024